Morocco: Establishing Mechanisms for a Microfinance Housing Project

Abt Associates Inc.

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Cambridge, MA
Lexington, MA
Hadley, MA
Bethesda, MD
Washington, DC
Chicago, IL
Cairo, Egypt
Johannesburg, South Africa

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Prepared by
Abt Associates Inc.

Abt Associates Inc.
Suite 600
4800 Montgomery Lane
Bethesda, MD 20814-5341

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Executive Summary:

The Bidonville Resettlement Program (BRP) being conducted in Morocco under the auspices of the Ministry of Habitat and the *Agence Nationale de la Lutte Contre l'Habitat Insalubre* (ANHI) has made great strides, but the pace of the program has been hampered by the lack of credit for home construction on the serviced sites prepared and sold to the target beneficiaries by ANHI.

Concurrently, Morocco's fledgling Micro Finance Institutions (MFIs) have expanded rapidly to serve the microenterprise credit needs of the population who are the primary targets of ANHI's Bidonville Resettlement Program.

Micro lending for small enterprise and micro lending for housing are somewhat different, however, and the regulatory authorities have been reluctant to authorize home construction lending for MFIs. To determine the feasibility of MFI home lending and to gain valuable experience in this field, a pilot project on home lending to ANHI's target population in the Tikiouine neighborhood of Agadir has been proposed.

This report contains the results of surveys and focus group interviews conducted in late 2000 among the target population to determine their credit needs and debt-carrying capacities. Based on this information, and taking cognizance of the legal limitations imposed on MFIs by Moroccan microfinance law, this report presents an institutional and financial design for the pilot project, identifying the parameters that are critical to its success.

Affordability:

The analysis of the survey and focus group data indicates that approximately half of the target population expressed a demand for credit in the 10,000 to 20,000 dirham range which, given the cost of credit and the cost of originating and servicing loans, is "affordable" on relatively short terms (two to three years) by households earning approximately 24,000 dirhams a year. The median income of the survey sample was 20,000 dirhams a year, very close to the calculated amount required if the borrower devoted the customary 25 percent of income to loan payments. Thus, the terms proposed in the project design would yield a substantial supply of affordable credit to the target population.

Institutional Structure:

MFIs are most experienced in lending to the target population but they do not presently have authority for home lending or savings mobilization. Commercial banks have both home lending authority and a broad base of deposit resources. Commercial banks lack the experience in lending to the target population, however. Moreover, the banks' internal policies and practices in serving its primary lines of business are likely to be at significant variance with the procedures required for delivering credit to the informal sector.

To bridge this gap and combine the respective strengths of the MFIs and the commercial banks, the recommended institutional design of the pilot project calls for a participating MFI to establish a not-for-profit subsidiary—an Origination and Servicing Unit (OSU)—to deal directly with the target population, acting as agent for the participating commercial bank. The commercial bank will be the legal lender of record, but the OSU will administer the process of granting loans to the target population and collecting the loan installments under an originating and service agreement between the OSU and the commercial bank. The OSU will receive an origination fee from the borrower when the loan is disbursed to cover the cost of loan processing. A fee to cover the OSU's cost of servicing will be added each month to the loan payment. The bank will receive an appropriate rate of interest as a return to investment plus a monthly contribution to a loan loss reserve.

If the pilot project is successful, an empirical basis for conferring home lending authority on the MFIs would be established and the OSU subsidiary could easily be absorbed into the MFI where combining operations would result in additional cost efficiencies and marketing synergies.

Financial Structure:

Although the bank is the legal lender of record, the OSU serves as the retail supplier of credit and the bank—in practice—serves as the wholesale supplier. To facilitate the booking of these credits at the bank and to reduce the perceived risk exposure of the bank, a variety of "credit enhancements" are included in the project design along with a procedure for managing the cash flow from "pools" of small loans to allow them to mimic repayment flows of the size the bank would receive on lines of credit extended in the normal course of business with the formal sector. All loan repayments "pass through" to the bank on a monthly basis, but the process anticipates a future time when these cash flows can be managed to produce more appealing securities to lenders and investors.

The following credit enhancements are included in the pilot project design:

- **Delinquency Reserve Fund:** As an element of the loan application approval process (underwriting), loan applicants will be required to deposit in a mutual account with the participating bank at least three monthly installments equal to the monthly payments on the loan for which they are applying. These funds will constitute a Delinquency Reserve Fund, from which the OSU can withdraw if and when the borrower is unable to remit payments in a timely fashion. The balance remaining in the fund when the loan is fully repaid will be returned to the borrower.

- **Group Credit Life Insurance:** Typically a very inexpensive insurance product, borrowers should be entered into a group life insurance policy that pays the balance of the loan in the event of the borrower's death.

- **USAID Development Credit Authority Guarantee:** A DCA guarantee has been approved for this pilot project that will cover 50 percent of the risk to the lending institution.

- **Loan Loss Reserve:** As proposed in this project design, the bank will establish a loan loss reserve against all credit advanced to the target population. The contribution to the loan loss reserve should be one-third (3 percentage points) of the 9 percent interest charged on the loan.

- **Solidarity Groups:** Although not an integral part of the project design, success with solidarity group lending has been noted in virtually all countries that have a microcredit lending program. Solidarity Group loans should therefore be permitted, though not required, under this pilot program.

As proposed under this project, the OSU will employ techniques used in the most advanced mortgage markets for accessing funds from diverse investors. Essentially this technique assembles a number of loans into a single "pool." These loans are typically of similar maturities, issued at similar rates of interest, but are of different sizes and therefore make payments of differing amounts. The manager of the "pool" collects all these diverse payments into a single payment, which for administrative reasons is more attractive to a large investor. In the present case, the bank is like a large investor—seeking to avoid the administrative burden of accounting for many small loan payments, but willing to book a large payment that represents the combined payment flows of many small loans.

This feature, plus the credit enhancements discussed above, are intended to make informal sector home lending attractive to commercial banks and to anticipate a time when this technique can be applied to a range of financial products and markets in Morocco.

Pro-Forma Financial Feasibility:

The cash flow analysis presented in this report clearly indicates that the pilot project is financially feasible under reasonable assumptions based on empirical evidence developed during the course of the study.

Probably the most critical of the assumptions required to establish pro-forma financial feasibility is that an OSU can service at least 750 loans with a staff of four credit agents, a credit coordinator and reasonable incidental expenses. The servicing costs per loan of smaller portfolios will correspondingly reduce affordability to the target population. While the pilot project envisions providing credit to 1,100 beneficiaries, it is desirable to include two MFI/OSUs in the pilot project. Since each one of these will have a minimum staff and essential costs to cover, it is recommended that the number of beneficiaries be increased to at least 1,500 to allow each OSU to service at least 750 loans.[1]

It has also been assumed that the credit enhancements included in the program will permit the participating bank to lend at 9 percent interest, which includes a 3 percent loan loss reserve contribution. Should the bank require a higher return on investment than 6 percent, affordability would obviously suffer and the degree to which financial feasibility can be established would diminish.

Timelines for Action:

Several steps must be taken to advance the pilot project to its implementation phase.

- **Resident Advisor:** Recruiting and bringing a resident advisor to Morocco to provide day-to-day coordination of the pilot project is a crucial input. The Resident Advisor will be involved in helping to write the detailed origination and servicing manuals for the OSU and in developing a management information system for monitoring and evaluation of the project. Indeed, the resident advisor should be involved in most, if not all, the start-up and training activities and it will be difficult to initiate the project until his/her arrival is imminent.

- **Legal Formation of the OSU:** Concurrently with the recruitment of the resident advisor, the documents establishing OSUs as subsidiaries of the participating MFIs should be prepared and executed, setting forth the specific

[1] Including the established clients of the MFIs in the target group makes this modification eminently feasible.

program conditions to which the MFIs will conform.

- **Execute Memorandum of Understanding/Origination and Servicing Agreement:** A formal agreement between the participants in the pilot project—particularly the MFI/OSUs and the bank(s)—must be in place before loan applications can be accepted and underwriting begin.

- **Recruit Staff for the OSU:** A third activity that must precede implementation of the pilot project is the recruitment of key staff for the OSU—a coordinator and at least two credit agents need to be in place before loan applications can be received and underwriting begin.

A variety of other actions are detailed in the Project Implementation Schedule presented in the main body of this report, but these four steps must be taken before the project can go forward.

Introduction

The Government of Morocco regards adequate housing for all people as a major policy priority and has launched a number of programs to assist poor households to obtain shelter and to ensure that they receive basic services, especially potable water and sanitary sewage. These programs are not free of charge, however; they require significant contributions from the beneficiaries.

In the program run by the *Agence Nationale de la Lutte Contre l'Habitat Insalubre* (ANHI) to relocate households from *bidonvilles* (squatter settlements) without adequate services to properly serviced sites, households must mobilize the funds to pay for the serviced plots and to construct dwellings according to standards established by ANHI. Although the price of the serviced site is below market, no subsidy attaches to the cost of construction of the dwelling unit and even allowing for the fact that construction takes place incrementally, households find it difficult to mobilize the necessary funds in a timely fashion.[2] ANHI estimates that this lack of construction finance has caused many bidonville residents to not purchase (or to postpone the purchase of) ANHI subsidized lots.

Access to credit on affordable terms would greatly alleviate this problem.

Commercial banks in Morocco finance only about 20 percent of total housing production, most of which is clustered at the upper end of the income spectrum and in spite of government interest rate subsidies, private banks do not extend loans to middle- and lower-income groups. The Government bank charged with specialized responsibility for housing finance—*Credit Immobilier et Hôtelier* (CIH) —is in financial difficulties.

Recent initiatives to establish a network of Micro Finance Institutions to meet the needs of small business in Morocco has been quite successful and it is believed that the same principles and similar techniques can be applied to extend housing credit to lower-income households, in particular the clients of ANHI's *bidonville* resettlement program.

USAID/Morocco therefore commissioned a study to design a feasible approach to a microcredit program for housing in Morocco, leading up to a pilot project to test this approach in the commune of Tikiouine in the Agadir urban area. The study comprised three principal elements:

[2] The target population earns less than the minimum wage requirement to qualify for the government subsidy program.

- a demand analysis based on a survey of 311 of the 1,100 target households in the pilot project area,
- a legal and institutional analysis to identify constraints and to determine the feasibility of specific institutional arrangements and
- a financial feasibility analysis to assess the viability of the proposed design.

The Demand Analysis

A survey of 311 ANHI client households in the Tikiouine pilot project area was taken to serve as the basis of an assessment of the likely level and pattern of demand for housing microcredit. The survey also sought to determine client debt-carrying capacity.

Household Income:
The average household income reported by the survey respondents was 21,709 dirhams ($2,171) or 1,809 dirhams ($180) per month. The responding households also reported an average annual expenditure of 18,400 dirhams ($1,840). Of this total, 15,500 dirhams went for regular expenses (food, clothing, transportation) and 2,900 dirhams were devoted to extraordinary expenses such as feasts, travel and/or medical care. Reported average expenditures therefore accounted for 83 percent of reported average income, leaving 3,309 dirhams (15 percent of income) available for saving or debt service. These data should be treated as indicative, not as definitive.

Annual incomes reported by the survey respondents ranged from a low of 5,400 dirhams to a high of 66,000 dirhams; the median annual income reported was 20,000. Only 7.8 percent of the survey respondents reported an annual income of 10,000 dirhams or less; 12.6 percent reported annual incomes over 30,000 dirhams. The vast majority (79.7 percent) of the respondents reported annual incomes between 10,001 and 30,000 dirhams.

The majority of the reported income of the survey participants is from regular salaries, which may be a reflection of ANHI's selection criteria more than a representative characteristic of the "typical" informal sector household.

Saving:
Independent evidence on both willingness and ability of this target group to save was developed. Households that had already moved to their assigned plots reported prior savings sufficient to acquire the plot and begin construction. Households still living in the remaining *bidonville* section, however, reported virtually no saving. These findings suggest a wide range of variability in the saving and credit-carrying capacity of the target group.

Among those households that had moved, the cost of the serviced site clustered between 15,000 and 17,500 dirhams, the average cost for the two main divisions of the development. ANHI's pricing policy is still evolving. A number of plots had been resold by eligible households who had purchased a plot from ANHI and then resold it, reaping the gain. This arbitrage produced an average cost of a plot of 23,400 dirhams. Put differently, some of the households now occupying the ANHI plots and constructing houses on them are not clients of the Bidonville Resettlement Program.

Most of the households that had already settled on their assigned plots reported plans to expand their dwelling unit. The overwhelming majority (87.5 percent) indicated that they planned to add another (first) floor to the ground floor. Most households see an additional floor as a rental unit, which would constitute an income-producing investment.

Demand for Credit:

Households also responded to questions about their likely demand for microcredit. This information is, of course, "no-commitment demand" since the households knew nothing about the terms of the possible loans, only the amount they would like to borrow. Two-thirds of the households interviewed indicated that they would like a small loan for housing expenditures. There was, however, virtually no interest in loans in the 3,000 to 5,000 dirham ($300 to $500) range. The greatest interest was for loans in the 20,000 dirham ($2,000) range, with 28.7 percent of households in this category. About 10 percent of the households expressed interest in loans of 10,000 dirhams and another 10 percent in loans of 15,000 dirhams. Thus, roughly 50 percent of the sample expressed interest in loans between 10,000 and 20,000 dirhams. However, the survey respondents were not asked about their interest in small, sequential loans for incremental construction.

From focus groups, information was developed that indicated households would be interested in successive loans of 5,000 to 10,000 dirhams and felt that payments of 200 to 400 dirhams per month would be acceptable, with a preference for a bi-weekly payment schedule. The respondents indicated a preference for annual interest rates around 8 percent, which is the interest rate for long-term (10 to 15 year) housing loans from banks.

The focus group participants stressed the need for rescheduling options in the event of household difficulties (illness, loss of job) and unusually heavy expenditures during major holidays and during the back-to-school period. They also wanted the option of early repayment if funds became available.

Debt Service Capacity:

The survey conducted as a component of this study sought to gauge households' willingness and ability to repay a (micro) credit. The question about "possible" monthly payments was asked in conjunction with the question about current outstanding loans, so that the "possible" payment is likely to be a good reflection of actual capability, not merely a hypothetical capacity. In any event, answers on such payments were provided only by those households that also indicated they were currently repaying a loan. This group comprised 65 percent of all households in the sample, an indication that households in the target group use credit and are accustomed to servicing a loan. A majority of these households make monthly payments.

Monthly payments for households reporting loans average 387 dirhams, or 19.9 percent of average income of 23,313 dirhams, slightly higher among the households repaying debt than the 22,179 of all households in the sample.

Institutional and Legal Analysis

The Institutional Structure:

Micro Finance Institutions:

Micro Finance Institutions were authorized in Morocco by an act of Parliament in February 1999.

As of October, 2000, Moroccan authorities have authorized nine micro finance institutions. The study team interviewed five of these MFIs with offices in Casablanca or Rabat or which had an office in the Agadir region, where the pilot project is to be launched.
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- *La Fondation pour le Développement Local et le Partenariat Micro-credit* (FONDEP);
- *L'Association Marocaine d'Appui à la Micro-enterprise INMMA;*
- *L'Association Al Amana Pour le Développement des Micro-Enterprises;*
- *La Fondation Banque Populaire pour le Micro-credit;*
- *La Fondation Zakoura Micro-credit.*

Of these five MFIs, FONDEP did not have an office in the Agadir region and did not plan to open one in the next year. INMMA had only just received authorization to operate as an MFI. Banque Populaire's MFI intends to focus on traditional microcredit lending. The remaining two institutions—Al Amana and Zakoura—are candidates for the role of microcredit providers for the pilot project.

This law offers three principal exemptions from the prevailing legal and regulatory constraints to allow MFIs to operate on a sustainable basis:

- greater flexibility in terms of effective interest rates charged for small loans with short maturities,
- an extension of tax exemptions, in particular exemption from the value-added tax assessed at a rate of 20% (7% for banks) on all billings for sales or services, fees and commissions included, for a period of five years following accreditation, and
- increased flexibility in raising funds by making contributions to accredited MFIs tax deductible and by authorizing MFIs to borrow funds for on-lending to their clients.[3]

The law limits MFIs to maximum loan amounts of 50,000 dirhams ($5,000), does not allow them to accept deposits and requires them to be financially self-sufficient within a period of five years from the date of accreditation.

MFIs are permitted to borrow for the purposes of on-lending—but only for income-generating activities—and may form partnerships with banks for their lending operations and for setting up savings accounts for their clients.

For present purposes, the most important constraint imposed by the law is that it limits lending to income-generating activities (i.e., small business loans), thus forbidding lending by MFIs for housing that is not part of an income-generating activity.[4] (For example, addition of a room for rent or for use as shop or store.) Thus, any MFI that sought to lend for housing would essentially have to either make those loans from its own capital (*ressources propres*), which would include grants, but exclude debt capital, or qualify as a financial intermediary—in effect, a bank—and meet all the conditions laid out in the banking law. An amendment to article 2 of the Micro Credit law has been proposed, but has not yet been introduced in Parliament, much less enacted. The proposed amendment, with changes in italics, is as follows:

> Est considéré comme micro-crédit tout crédit dont l' objet est de permettre à des personnes économiquement faibles de créer ou de développer leur propre activité de production ou de service en vue d'assurer leur insertion économique, *ainsi que leur permettre d'acquérir, construire, achever ou amélior leur logement, tant que celui-ci ser dédié partiellement ou totalement à des fins d'habitation ou à des activités de production ou de service, y incluse la location à des tiers.* La montant du micro-crédit, qui ne peut excéder cinquante mille dirhams (50.000 DH), est fixé par décret. Ce décret

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[3] Prior to October 2000, Fondation Zakoura had established lines of credit with several banks for on-lending micro credit to small business at highly concessional interest rates.

[4] It is likely that MFIs have made loans for construction and home improvement because it is not uncommon for the home to be used for commercial and "cottage" industry purposes.

peut prévoir plusieurs niveaux de ce montant en fonction des objectifs de chaque association de micro-credit et de ses moyens financiers.

Although some government officials and leaders of MFIs are sanguine about passing such an amendment in a short period of time, there is understandable reticence to broaden the scope of MFI activity so soon after passage of the enabling legislation.[5] Waiving certain restrictions have some precedent in the Moroccan financial system.[6] Securing a waiver would, however, take several months.

That the Moroccan authorities presently feel uncomfortable about amending the law authorizing MFIs may be understandable, but the long-term economic development interest of the country will ultimately be served by bringing a full range of financial services to a segment of the population ("non-bankable" sector)[7] not commonly served by mainstream financial institutions. Efficient, affordable financial service can be a core element in integrating these two sectors, encouraging the full mobilization of domestic saving and promoting an efficient allocation of economic resources. MFIs are currently developing expertise in lending to the informal sector and, in so doing, they are building a bridge to the formal sector in one dimension of economic activity. Developing similar expertise in providing housing finance to the "non-bankable" sector is a second dimension, one that has, over time and around the globe, proved particularly effective in mobilizing domestic saving.[8]

Non-Governmental Organizations and Not-for-Profit Associations that lend from their own capital (*ressources propres*) to grant concessional loans (*à des conditions préférentielles*) to their clients are exempt from the banking law (Article 12). Such associations can, of course, borrow to finance their own activities. For example, a cooperative in an apartment building can borrow to finance construction or make improvements or repairs. NGOs may not borrow for on-lending to third parties.

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[5] An associated issue for MFIs is the prohibition on deposit taking. The informal sector is in need of the full range of financial service and significant benefits could accrue to savings mobilization efforts on the part of the MFIs. The issues involved here, however, are much more profound than the relatively simple expansion of lending MFI lending authority to include housing.

[6] For example, banks have been exempted in the past from restrictions on the portion of their loan portfolio concentrated in one particular enterprise or group and a special entity within the Central Bank (Bank Al-Maghrib) has been charge with overseeing bank performance under these waivers.

[7] In most contexts, the reference would be to the "informal" sector. In Morocco, this term implies illegal, not merely unregulated, economic activity. We are therefore using the term "non-bankable" in lieu of "informal."

[8] See James W. Christian, *Integrating Housing Finance into the National Finance Systems of Developing Countries* (Nairobi: United Nations Centre for Human Settlements (Habitat), 1991), esp. Appendix A.

Commercial Banks:

Commercial banks enjoy full funds mobilization and lending authority in Morocco. Banks, however, do not engage significantly in housing finance operations even in the formal sector and express little interest in making relatively small loans for housing purposes. From the banks' point of view, they have little or no expertise in micro lending and consider it both risky and administratively expensive to originate and service small loans, particularly to households in the informal sector. Two very important aspects of bank authority make it extremely desirable—even essential—to involve them in this program:

- banks are legally and administratively able to mobilize financial resources for investment in a wide variety of loans, including housing, and
- banks can offer savings deposits to the target population, though as stand-alone products, the cost of administering these small accounts are considered non-viable by banks.[9]

Inasmuch as banks are engaged in home lending (at the upper end of the income stratum), they also have the personnel and procedures in place to evaluate housing loan applications, originate and service those loans and to enforce repayment. The procedures in place for this lending are not, however, well-suited to lending to households in the informal sector for a number of reasons—occasional instability of borrowers' incomes, the difficulty in verifying those incomes since many, if not most, of the household heads in the informal sector are small business proprietors, not salaried employees, several members of the family earn income on a sporadic basis, and so on. Accordingly, the banks would have to establish different criteria for its informal-sector, low-income clients than for its formal sector (mostly salaried) clients. Dual criteria of this sort are, of course, feasible, but clearly the task is easier for an MFI already engaged in lending to this client base, familiar with its variances and expert in both loan underwriting and loan recovery than for a bank. For the MFI, only small changes in underwriting standards and recovery procedures are likely to be required to lend for home construction and expansion, particularly since some home lending associated with income-generating activities is already a part of the MFI portfolio.

Therefore, involvement of the banks as suppliers of loanable funds to low-income households and as repositories of their savings deposits will, it would seem, depend on making both loans and savings deposits look and perform as much like the banks' main line of business as possible. The structure of the pilot project proposes to do this by combining the MFIs' micro-credit management expertise with the banks' legal authorities and superior ability to mobilize loanable funds.

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[9] At some point in the development of a microfinance system, funds mobilization authority would appropriately be conferred on MFIs; at present, that authority resides only with the banks.

Financial Structure for the Pilot Project

Commercial banks borrow money (the deposits made by the banks' clients) and use those funds to lend to others. For the bank to live up to its promises to repay its depositors when they demand the return of their funds, the bank must use its expertise to make loans that will repay the principal amount in a timely fashion with a yield that covers the cost of the bank's operations and yields a profit appropriate to the risk it manages in lending. The bank's administrative efficiency holds down its cost of operation, but the effectiveness of its risk management depends critically on its understanding of its borrowing customers' circumstances and characteristics and the nature of their businesses.

The scale of the bank's operations also play an important role. In general and within reasonable ranges, small loans cost just as much to originate and service as large loans. This is a primary reason why banks are less than enthusiastic about making small loans (or taking small deposits, for that matter). To recover its administrative costs as well as be compensated for the risk it accepts, the charge for small loans, in general, needs to be higher than the charge for large loans.[10]

There is no legal or logical reason why commercial banks in Morocco could not establish their own origination and servicing units in informal sector markets, recruit and train a specialized staff and provide financial services to low-income borrowers. The fact is, however, that banks in general, not just in Morocco, have not chosen to expand their activities in this direction.

MFIs have shown both the willingness and the ability to serve this market effectively and are rapidly developing a favorable market identity within the "non-bankable" sector. Given the legal constraints on MFIs in lending for housing, the task of the pilot project is therefore to test institutional arrangements and financial management techniques that can tap the banks' sources of funds in ways that do not expose the banks to unacceptable risks or unacceptable administrative costs.

[10] The ceiling on commercial interest rates in Morocco is 17.5% but banks qualify for an interest rate subsidy under Morocco's low-income housing support program. The law enacted by Parliament in 1993 includes access to capital by financial institutions (read banks) at 2 percent interest for on-lending at 6 percent to borrowers who meet the following criteria: (1) monthly income at or below 3,600 dirhams; (2) value of their dwelling does not exceed 200,000 dirhams and (3) the surface area of their house does not exceed 100 m2.

The pilot project will also develop critical technical skills needed to manage microcredit for housing.

Origination and Servicing:
Operationally, the most important component of this pilot project is the Origination and Servicing Unit (OSU).[11] This unit would best be lodged in one or more MFIs committed to participating in the pilot project for several reasons:

- MFIs have a favorable identity in the target market. Moreover, assuming the success of the pilot project, that future amendments to the law governing the operations of MFIs will be enacted, and given the MFIs interest in carrying out this project, it is preferable to initiate low-income, informal sector home lending under the auspices of the MFIs.[12]
- MFIs are developing critical expertise in lending to the "non-bankable" sector, in understanding their client households and in mastering the specialized techniques of micro finance. In general, MFIs could be expected to be strengthened over time through the synergy of also lending for housing for their informal sector small business clients.[13]
- Associating the OSU with the MFI permits cost savings through sharing some personnel (e.g., accountants, perhaps even some loan officers), office space and equipment.

Although the OSU will operate under the name of the MFI, it will act only as an agent of the participating bank or banks and will have no financial interest in the loans it originates and services on behalf of the banks other than the payment it receives for services rendered.

For two reasons, it will be preferable for the MFI to establish an NGO subsidiary to serve as the OSU legal entity with its own set of accounts. First, this organizational separation attempts to conform to both the letter and the spirit of the law in proscribing MFI authority

[11] Conceptually and operationally, the Originating and Servicing Unit combines the functions of a mortgage banker who originates loans for sale to investors and services the loans on behalf of those investors and "conduits" who purchase mortgages, form them into pools and sell "participations" in those pools to investors. The conduits them manage the cash flows on behalf of the investors.

[12] Interviews with Al Amana loan officers in the southwestern region of Agadir established that at least ten clients a month came to the bureau asking for some kind of home improvement loan. (See Goeff Davis and Eliza Mahoney, *Housing Microfinance: Building the Assets of the Poor*, prepared for USAID/Washington, Draft Report, February, 2001, p. 39.)

[13] As of January, 2001, Al Amana had an outstanding loan portfolio of US$4.4 million in approximately 40,000 loans with a delinquency/default rate of only 0.29 percent—that is, 116 loan defaults out of 40,000 loans. (See *ibid.*, pp. 41-42.)

to lend for housing not associated with income generation.[14] Second, NGOs are eligible to receive grants, which in the initial phases of this pilot project might include grants for capital equipment or even salary support while loan pools are being assembled for submission to participating banks for funding.

As indicated earlier, the pilot project is to be located in the commune of Tikiouine in the Agadir urban area and in other localities served by participating MFIs. Initially, the OSU will focus on originating and servicing loans for the following purposes:

- acquiring plots of land from the *Agence Nationale de la Lutte Contre l'Habitat Insalubre* (ANHI),
- beginning construction of a dwelling on such a plot, and/or
- expanding, improving or modernizing an existing dwelling for which the household has or will obtain legal title under the loan.

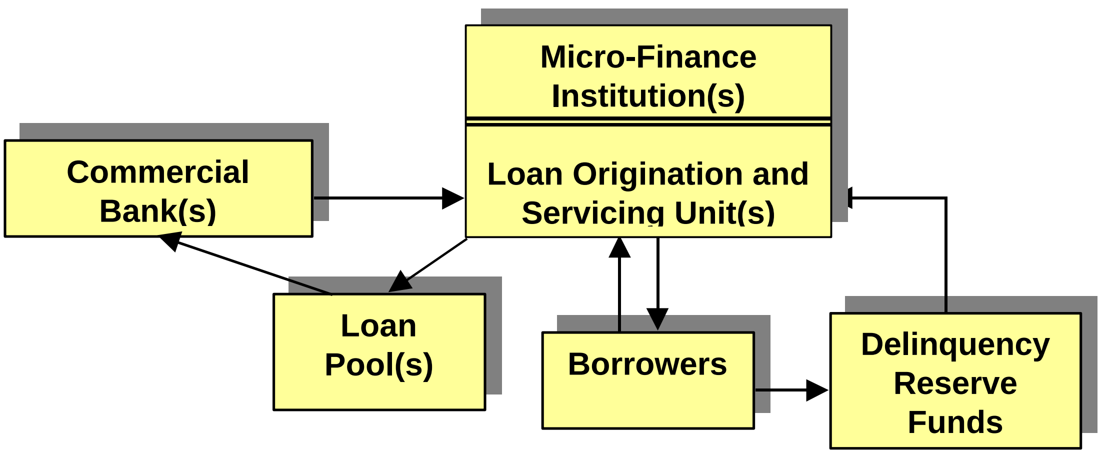
Because of the constraints placed on MFIs by their enabling legislation, we must look primarily to the commercial banks as the ongoing source of funds for microcredit for housing and the lenders of record under the law. The OSU subsidiary of the MFI therefore acts as the banks' agent and will employ financial management techniques (detailed below) that will make this lending closely parallel traditional bank lending practice.

Figure 1 illustrates the relationships among the participants. The OSU is a subsidiary of the MFI and an agent of the bank(s). The OSU deals directly with the borrowers, originating and disbursing loans, collecting repayments and remitting payments to the bank(s).

[14] One important reason for conducting the pilot project is to provide practical experience on the feasibility of making micro loans for housing and thus to determine if and when home-lending authority should be conferred on the MFIs.

Figure 1

Diagram of the Institutional Structure



The Financial Mechanism

Loan Qualification:
Loan applications will follow the procedures already in force at the MFI with appropriate modifications for the fact that the loan is for home construction, expansion, and/or improvement. In addition, a delinquency reserve fund must be established to protect the cash flow from the occasional payment shortfalls likely to occur over the life of the loan.[15]

Once the OSU loan officer has determined that the loan amount requested by the applicant is appropriate for the purpose intended and that the applicant has some evidence of the necessary income to repay the loan, the required periodic payment can be determined. Before loan approval, the applicant would be required to save the amount of the periodic payment for three consecutive months. (For example, suppose the applicant is seeking a 10,000 dirham loan for 24 months, with a service charge of 1,600 dirhams. The monthly payment would be computed at 483 dirhams. The applicant would therefore be required to

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[15] During the focus group phase of the market study, respondents were sensitive to the need for payment flexibility to accommodate occasional heavy demands against income—back-to-school expenses, religious feast days and so on. A delinquency reserve fund would permit the OSU to keep the loan current in such circumstances.

save that amount each month for at least three consecutive months. His total saving would amount to 1450 dirhams, which would be used to establish the delinquency reserve fund. If the applicant's credit history with the MFI showed a pattern of prior delinquency, he might be asked to save for more than three months to establish a larger delinquency reserve fund before the housing loan was granted.)

The delinquency reserve fund would be deposited in the participating bank(s) and managed under trust by the OSU. The reserve fund is owned by the borrower but is not be subject to withdrawal until the loan has been fully repaid. Under the trust agreement, the OSU is authorized by the borrower (and the bank) to use the fund to cover any payments the borrower might miss during the term of the loan.[16] These funds constitute that borrower's contribution to the Delinquency Reserve Fund and will be released to the borrower at the time the loan has been paid in full.[17]

Mutual Savings Accounts:
To avoid the administrative cost problem for the banks, the reserve for delinquency should take the form of a "mutual" savings account—that is, one savings account owned by the borrowers comprising a given loan pool. This may require a trust agreement between the OSU and the borrowers, but there should be no legal problem for the bank to hold the account in the name of the trustee. (This approach anticipates a time when the MFI will also be expanding its financial service to the informal sector by mobilizing saving.)

Lines of Credit:
Inasmuch as the bank will be the legal lenders of record and the OSU its agent, the credit allocated by the banks for this program is not a true line of credit. The procedures involved are, however, designed to mimic a line of credit so that at such time as the microfinance law is amended to allow MFIs to borrow for on-lending for housing, minimal changes will be required in the institutional arrangements between the MFI/OSU and the participating bank or banks.

For present purposes, we are defining this arrangement in classic line-of-credit terms as follows:

[16] A delinquency reserve of 1200 dirhams against a 10,000 dirham loan represents coverage of the top 12 percent of the loan, slightly more than the standard 10 percent coverage of private mortgage insurance in the United States.

[17] The balance in the reserve for delinquency that is attributable to this borrower could also be used to satisfy the remaining balance of the loan at the time when the amount in the reserve is equal to the remaining outstanding balance.

> A line of credit is used by firms to establish reasonable assurance of a maximum unsecured borrowing limit for a definite period of time. In lieu of an elaborate document setting forth all the terms and conditions of the credit, the approval of a line of credit may be evidenced by an informal letter written by the bank to the borrower. (In this case, instructions to the OSU spelling out the minimal acceptable size and composition of the loan pools to be originated and serviced on its behalf.) A bank customarily requires that a borrower keep a certain percentage of this line, perhaps 20 percent, as a minimum deposit balance. (This corresponds to the delinquency reserve fund.) In addition, the bank reviews lines of credit as they expire to determine whether or not the borrower's current financial condition warrants renewal of the line of credit.[18]

Lines of credit as employed in short-term business borrowing are typically unsecured and their repayment is typically not "scheduled" in the same way as a loan with a definite term to maturity. When the bank treats the credit advanced in this way, it facilitates the "pass through" of loan repayments from the pools formed by the OSU.

Lines of credit are often unsecured in any formal sense. In the present case, however, the loans originated and serviced by the OSU on behalf of the bank are secured by "credit enhancements," as discussed below.

It is understood that the pilot project anticipates providing housing loans of one type or another to 1,100 households participating in ANHI's resettlement program in Tikiouine. For illustrative purposes, assume that the total loan portfolio for this target group of clients will amount to 15 million dirhams over two or three years. Not all loans will be granted on the first day of operations, nor will each loan necessarily be of the same term to maturity, so the credit line accounts established within the bank might have a maturity of three years and a line limit of, say, 10 million dirhams.

Loan Pools:

As the OSU develops loan applications and initiates the build up the delinquency reserve fund, it will also begin to form the loans of these applicants into "pools." The size of each pool—that is, the dirham amount—should approximate the size of the credit lines the bank consider "normal" for their operations so that the cash flow from the pool will mimic the cash flow from a standard credit line the bank would make in their usual business practice.

The individual loans that make up the pool need not be of the same size or maturity since it is the cash flow generated by all the loans in the pool taken together that the bank will

18 Description based on Jerome B. Cohen and Sidney M. Robbins, *The Financial Manager* (New York: Harper and Row, 1966), p. 381.

recognize on the books. In commercial banking, credit lines are typically less formal arrangements than term loans. Thus, such prepayments of housing loans as may occur during the life of the pool should easily be accommodated by the bank.

Credit Enhancements:
In addition to the delinquency reserve fund described above, which is comparable to the compensating balance requirements of a classic bank line of credit, three other credit enhancements are proposed.

Delinquency Reserve Fund:
The delinquency reserve fund is designed to accommodate the circumstance of irregular income flows of the target population by allowing the OSU to draw from funds deposited by the borrowers in advance to meet occasional shortfalls in loan payments that may arise from extraordinary back-to-school expenses, illness, and other episodic events that impose heavy demands on the borrower's income or interrupt the flow of that income.

The delinquency reserve fund is not pooled; borrowers retain the ownership of those funds and the funds may only be used by the OSU to cover payment shortfalls in the payment stream of that particular borrower's loan. Borrowers are expected to make up missed payments to restore the balance of the reserve fund when payments have been missed. Preserving the borrower's equity in the delinquency reserve fund gives the borrower an incentive to make timely payments, since the balance of the fund will revert to him when the loan has been satisfied. (Alternatively, when the outstanding principal balance of the loan is equal to the balance held by that borrower in the delinquency reserve fund, the reserve fund can be used to satisfy the loan.)

Group Credit Life Insurance:
Credit life insurance policies are written to pay the amount of the outstanding loan in the event of the death of the borrower. In all cases, such policies are designed to relieve the surviving spouse (usually the widow) of the burden of the debt. This is particularly important in the case of housing, when the loss of the principal income-earner (usually the husband) might threaten the loss of the family's dwelling. Written as a group policy and given the relatively small size of the loans involved, the cost of this insurance should be modest.

USAID Development Credit Authority Guarantee:
USAID has approved a Portfolio Loan Guarantee for credits advanced in furtherance of AID objectives of promoting commercial bank and microfinance institution investment in the shelter/infrastructure sector, improving access to formal sector shelter financing by low-income households and improving the living conditions of urban low-income households.

The DCA guarantee will cover up to 50 percent of the lending institutions' risk in lending for shelter for the target income groups. Combined with the proposed 12.5 percent coverage of the delinquency reserve fund provided by the borrowers themselves, the DCA guarantee extends risk coverage to 62.5 percent of the loan.

Solidarity Groups:

"Solidarity groups" are akin to indigenous rotating credit societies found in the informal sectors of virtually all Third World countries. In general, five to twenty individuals, usually known to each other, form a group for the express purpose of saving in order to obtain credit. Each individual agrees to save a specific amount each week or month for an agreed upon time. Each member of the group receives the combined savings of the group in his or her turn, where the sequence is determined by drawing lots or by bidding for the pool. Typically, the group dissolves once each member has received the pool. Although sterner means may sometimes be used, the pressure of one's peers not to default on the agreement is usually powerful enough that all loans are repaid.

Solidarity Groups are extremely efficient in that there are few administrative costs and peer pressure ensures repayment (that is, continued participation until all members have received the pool). Personal knowledge of the character and economic circumstances of each participant by the other members of the group replaces the need for documentation and since the group typically meets in the home of one or another of the members, no physical facilities are required to conduct business.

MFIs generally have favorable experience in lending to solidarity groups, but these are employed primarily in the case of shorter-term loans than shelter lending would be. Whether or not households seeking credit for home construction and/or expansion would be amenable to forming a solidarity group remains to be seen, but this option should be open to borrowers during the pilot project and if significant administrative cost savings can be anticipated in making loans to solidarity groups, appropriate reductions in the servicing charge should be made. (For example, if a representative of the solidarity group takes responsibility for handling repayments and repayment problems, the cost to the OSU is accordingly reduced and those cost savings should be passed on to the borrowers who constitute the solidarity group.) The greater likelihood of using the solidarity group approach may be found by the pilot project in smaller denomination loans (e.g., less than 5,000 dirhams) used for home improvement and expansion, but this should be a matter for pilot project experimentation.

Loan Loss Reserve:

A financial institution's capital is the basic form of loan loss reserve, but in the present instance, the OSU is acting as agent for the bank and is not at risk. It recovers its costs in originating and servicing loans and "passes through" the loan repayments to the bank. It is a not-for-profit organization. The Loan Loss Reserve will therefore be established in the bank.

For illustrative purposes and for testing the pro-forma feasibility of the program, a lending rate of 6 percent has been used as a return to investment for the participating bank. This is somewhat below the bank's standard loan rate of 8 percent, but that rate of interest includes a contribution to capital (profit) that serves as a loan loss reserve in a general way. Inasmuch as the pilot program is perceived as more risky than the bank's normal line of business, we have arbitrarily used a higher contribution to capital (loan loss reserve) of 3 percent.

Title Retention:

Although not a credit enhancement in the strict sense of the term, it is proposed that in those cases in which the borrower has title to his land from ANHI, that this title be held by the lending bank of record. Title retention would effectively prevent the borrower from selling the property without the lender's knowledge or permission while the loan was outstanding.

Costs of Operation and Affordability

The cost of credit to the beneficiaries consists primarily of two components: The cost of funds to the lender and the cost of origination and servicing. To these basic costs can be added a risk premium reflecting an assessment of likely default experience and a return on investment.

Typically, these costs, risk premiums and investment returns are summed up in a yield-cost spread—the difference between the yield on portfolio investments and the cost of funds—and a spread between 200 and 400 basis points (2 percent and 4 percent) is regarded as adequate.

In the present case, we believe the various credit enhancements outlined above will greatly reduce if not eliminate any risk premium that would otherwise be charged by the bank. And inasmuch as the method by which we propose to price the loan to recover the origination and servicing costs of the OSU, those costs also will not be reflected in the usual yield-cost spread. The primary component of the cost of credit to the borrower will therefore be an equivalent of the origination and servicing costs incurred by the OSU.

Cost of Operation:

Clearly, most of the costs of the OSU are fixed costs—equipment and personnel—and the larger the portfolio the lower the cost per unit (or per loan) will be. In the initial phases of the pilot project as the loan portfolio is assembled, the OSU will almost certainly operate at a loss. It is largely for this reason that the project design contemplates sharing of physical facilities with the parent MFI and that the MFI absorb as many start-up cost as it can reasonably afford so that the charges to the borrowers will more appropriately reflect the cost of origination and servicing for a fully developed portfolio.

In order to (1) establish market identification with the MFI, (2) maximize the transfer of knowledge and experience from the OSU to the MFI, (3) minimize cost in the start-up phase and (4) make the most efficient use of staff resources, the OSU should operate rent--free from the branch offices of the MFI and, insofar as possible, use staff resources of the MFI for such overhead activities as accounting.

Staffing and cost estimates of operation of the OSU are shown in Table 2. These estimates should be considered highly provisional. We have not made separate provisions for certain capital equipment items, such as motorcycles for the credit agents, copy machines, computers, and office furniture. Consequently, the 150,000 dirham start-up cost estimate may be insufficient, depending on whether or not some of these items can be provided from surplus by the MFI or purchased with technical assistance grants. Furthermore, we believe the salary costs reflect current conditions in Morocco, but consider these estimates subject to verification.

Table 2

Cost Estimates for the MFI/OSU
(dirhams)

<u>One-time Start-Up Expenses</u>	150,000
<u>Monthly Expenses</u>	
Salaries:	
Loan Officers/Credit Agents (4)	10,000
Administrator/Office Manager (1)	3,000
Coordinator (.5—one person, half time)	5,000
Social/Fringe Benefits (20% of salary)	3,600
Allocated Costs for Services from MFI	
Accounting	3,000
Operational Costs	
Transport, postage, telephone, etc.	3,000
<u>Total Monthly Costs</u>	27,600

These estimates of monthly costs for staffing and basic office expense amount to an annual sum of 331,200 dirhams. Assuming that, in the pilot project phase, each OSU originates and services 500 loans, the average annual cost per loan would be 662 dirhams; if an OSU with this staffing pattern could service 1000 loans, the average annual cost per loan would be 331 dirhams.[19] Thus, the efficiency of the OSU in terms of the number of loans it can effectively service with a given staff is a crucial issue for the success of micro lending for housing.

[19] It is not clear at this point what the optimum combination of staffing and size of loan portfolio should be. This will be one of the major findings of the pilot project.

The costs of operation must be spread over the loan portfolio in a proportionate fashion and this might be accomplished in several ways.[20] The most transparent way to deal with this issue is to require the borrower to pay an origination fee of, say, 200 dirhams, at the time the loan is closed (disbursed) and add to the monthly payment the average cost of servicing to the monthly payment required to amortize the loan. This is the method used below in calculating the cash flows and determining the pro-forma financial feasibility of the project.

Inasmuch as the cost incurred is essentially the same regardless of the loan amount, it is logical to attribute the same amount of cost to a 5,000 dirham loan as to a 20,000 dirham loan. Thus we can calculate costs on the basis of an average loan size, an average maturity and an average payment.

The various alternative costs per loan are shown below in Table 3, assuming a 9 percent rate of interest on the loan and an average loan maturity of two and a half years.

Table 3
Average Servicing Cost per Loan as a Percent of Loan Payment

Average Loan Size (dirhams)	Number of Loans in Portfolio		
	500	**750**	**1000**
5000	27.7%	18.5%	13.9%
7500	18.5	12.4	9.2
10000	13.8	9.2	6.9
11500	12.1	8.0	6.0
12500	11.1	7.4	5.6
15000	9.2	6.2	4.6

[20] Among these alternatives are the following: (1) the OSU might collect a flat fee for originating each loan and a percentage of the payment amount collected each month. For example, the origination fee might be set at 200 dirhams per loan with the servicing fee at, say, 8 percent of collections; (2) the borrower might be obliged to pay discount points upon disbursement of the loan equal to say, three to six percentage points.

Clearly, the larger the average loan size, the lower the servicing costs per loan. But it is equally true that the larger number of loans in portfolio that the OSU can service effectively, the lower are the servicing costs. Inasmuch as affordability will limit the size of the loan, the key issue is the productivity of the OSU in servicing a loan portfolio. If four credit agents can service 1000 loans, the cost of credit to the borrowers can be significantly lower.

Based on the information obtained from the survey and focus group interviews, we have estimated that loans of 5,000 dirhams will make up 30 percent of the portfolio, loans of 10000 dirhams will make up 25 percent of the portfolio, loans of 15,000 dirhams will comprise 30 percent of the portfolio and loans of 20,000 dirhams will make up the balance of 15 percent. The weighted average size loan would therefore be 11,500 dirhams.

Weighted average loan maturity is also an element in setting the servicing costs per loan. Shorter terms to maturity would lower servicing costs per loan because the monthly loan payment would be larger and, from a practical point of view, there would be fewer payments to collect.[21]

Affordability:

Aside from the fact that the target population is low-income and therefore has limited debt service capacity and a reluctance to take on long-term debt, the nature of the process of incremental construction poses some difficulty.

The pilot project is centered on Tikiouine, a settlement on the outskirts of Agadir. It has an initial target client base of around 1,100 households with varying credit needs depending both on the clients' credit-carrying capacity and the stage of construction of the dwelling.

The resettlement process involves several phases:

- acquisition of serviced sites from ANHI,
- construction of a dwelling unit, which typically proceeds incrementally, beginning with the foundation, walls and roof (essentially a "core" unit),
- upgrades and expansions of the core unit—for example, a second floor, with walls and roof and
- purchase of appliances and other household equipment

[21] We are reasoning here on monthly payments. Obviously, servicing activity will be higher if borrowers elect to make payments bi-weekly or even weekly, as some focus group participants indicated. Weekly payments might therefore deter delinquency, but also entail more intensive servicing activity.

The market study performed as a part of this project indicates that the principal needs for microcredit cluster in the second and third phases—core unit construction after the acquisition of the serviced site and expansion of an existing core unit.

Construction costs by stage of construction are reiterated below in Table 4.

Table 4

Construction Cost Estimates for Core Unit
(Dirhams)

Construction Phase	Low	High
Foundations (excavation and leveling)	10,000	15,000
"Soudouk"—filling the perimeter with agglomerate	5,000	7,500
Pouring concrete slab and support structures (this phase has to be accomplished in roughly 10 days)	20,000	20,000
Construction of walls for the ground floor	2,500	3,000
Totals	37,500	45,400

As noted earlier, participants in the survey conducted for this study indicated that they had saved to purchase the ANHI serviced, 60 m2 plot outright. Various estimates of the cost were given, which depended in part on ANHI's evolving pricing policy, the site location and whether or not the plot was purchased from ANHI or from another individual, but in general, the cost of the serviced site was in the range of 15,000 to 24,000 dirhams. The survey also indicated that the average plot-owner saved approximately 17,000 dirhams after purchasing the plot and before commencing construction.

From the empirical evidence developed from the analysis of survey data, we have estimated that the average loan size is likely to be about 11,500 dirhams. Average income of the target population was estimated at a little more than 22,000 dirhams and the strongest loan demand was expressed in the 10,000 to 20,000 dirham range. Clearly, the point at which credit is most likely to be essential is at the stage of pouring the concrete slap and support structures, an element of construction that cannot be done incrementally. The cost of this step is estimated to be 20,000 dirhams, so the household must either borrow 20,000 dirhams or save up some portion of that amount and borrow the balance to carry out this phase of the construction.

To recover the costs of operation estimated above (Table 2), we estimate that the size of the loan portfolio must be at least 750 loans and that under these assumptions, the monthly servicing cost per *average* loan would be 36.80 dirhams, which represents 8.6 percent of the scheduled monthly payment on an 11,500 dirham loan for 30 months at 9 percent. Inasmuch as it is hoped that a portfolio larger than 750 loans will be created by each OSU, the servicing fee required to cover the OSU's cost of operation was estimated at 8 percent of the monthly loan payment.

Table 5 shows the annual payment amounts required to satisfy various loan amounts and terms to maturity at 9 percent with an 8 percent servicing fee added.

Table 5

Annual Loan Payments at 9 Percent Interest
plus Servicing Fee[22]
(dirhams)

Loan Amount	12 Mos	18 Mos	24 Mos	30 Mos	36 Mos
2500	2833	1930	1480	1210	1030
5000	5667	3862	2960	2420	2061
7500	8500	5793	4440	3630	3090
10000	11334	7724	5921	4840	4121
12500	14167	9655	7401	6050	5152
15000	17000	11586	8881	7260	6182
17500	19834	13516	10361	8470	7212
20000	22667	15448	11841	9681	8242

Table 6 now shows the annual income required to satisfy each of these loans if the borrower devotes the customary 25 percent of annual income to the repayment of the loan.

[22] As illustrated in this table, the servicing fee is calculated as 8 percent of the monthly payment of principal and interest. Full exemption of the value added tax is also assumed.

These calculations indicate rather clearly that "affordable" loans are clustered between the 7500 and 15,000 dirham amounts and, respectively, the 18 months to 36 months terms to maturity. Extending the term to maturity to, say, 48 months, would permit a household earning 26,849 dirhams a year to afford a 20,000 dirham loan, but respondents to the market survey and the focus groups indicated that the target group was reluctant to extend their obligation to making loan payments beyond 36 months. If that is the case, it will be necessary for households earning less than the required income to save as much as 5000 dirhams before they can borrow the 15000 dirhams needed to complete the foundation and support structure phase of construction. Smaller loan amounts for the other phases of construction are, however, imminently affordable under the terms illustrated.

The survey data also indicate that approximately 80 percent of the sample earned annual incomes between 10,000 dirhams and 30,000 dirhams; another 12.6 percent of the survey sample earned annual incomes in excess of 30,000 dirhams. Thus, required credit appears to be affordable by a very large segment of the target population.

Table 6

Annual Income Required
With 25 Percent of Income Devoted to Repayment
(dirhams)

Loan Amount	**12 Mos**	**18 Mos**	**24 Mos**	**30 Mos**	**36 Mos**
2500	11334	7724	5920	4840	4121
5000	***22667***	15448	11841	9681	8242
7500	34001	***23171***	17762	14521	12364
10000	45335	30895	***23683***	19361	16485
12500	56668	38619	29604	***24201***	20606
15000	68002	46343	35524	29042	***24727***
17500	79336	54067	41445	33882	28849
20000	90670	61791	47366	38722	32970

Cash Flow Analysis: Critical Assumptions for Success

The principal purpose of financial modeling is to test the financial feasibility of a proposed investment decision given certain operational assumptions. Financial models, however, can also serve to illustrate or highlight areas where the proposed enterprise will need to concentrate maximum attention and effort to achieve desired business objectives. These attributes are particularly useful for "pilot projects" where the actual results of the project will determine not only whether the concept will be made operational, but also *how* the enterprise will be managed. The financial model developed for the proposed Tikiouine pilot project institutional structure provides some of these answers.

The assumptions used to model the proposed design are as follows:

Table 7

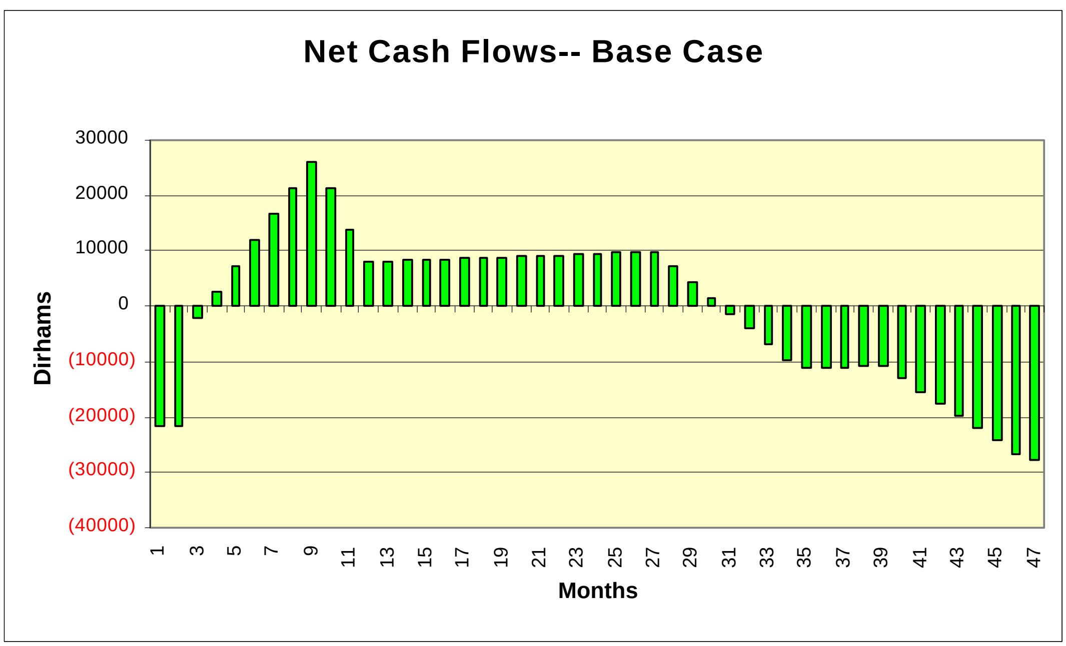
Assumptions for "Base Case" Financial Model

Critical Items	Item	Assumption	Rationale
	Interest rate to participating banks	6%	Low-risk return required by banks
✓	Interest rate to homeowner	9%	Bank rate plus 3% loan loss reserve
✓	Average loan size	11,500 dhs	Weighted average loan size based on survey results (see "Cost of Operation", pg. 24)
	Average maturity (tenor)	30 months	Average term required for payments to be affordable to average borrower (see "Affordability", pg. 26-27)
✓	Servicing fee (% of P&I payment)	8%	Cost of servicing average loan given current cost assumptions (pg. 23)
	Origination fee per loan	200 dhs	A method of spreading out the cost of servicing through a "front-end" fee (see pg. 22)
✓	Minimum number of loans originated by the OSU	750	Number of loans needed to achieve minimum financial performance under "base case" simulation

Critical Items	Item	Assumption	Rationale
	Payment modality	Monthly payments	Monthly payments require less servicing effort/ more accepted in mainstream financial sector
	Number of months of payment into delinquency reserve fund prior to lending	3 months	Establishes a "cushion" to keep loans current. Set at normal 90-day accounting period prior to classification as "non-performing loan". (See pg. 16-17)
	G&A expenses (monthly)	21,600 for 12 months/ 27,600 after 12 months	Two credit agents would be needed for initial origination and portfolio "establishment" period, and then 4 would be required to fully service the portfolio
	Delinquency/defaults	None	"Ideal" base case scenario

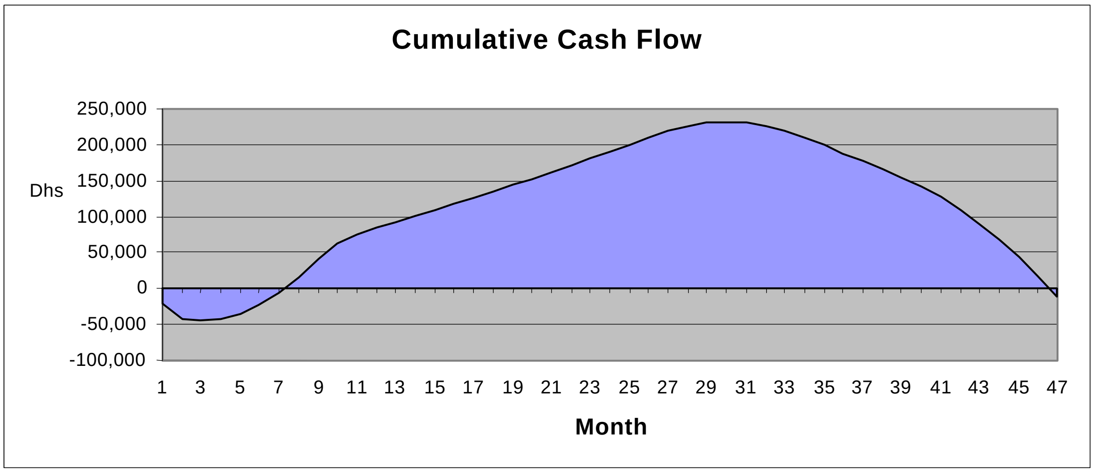
The "critical items" checked above are the most important determinants of the project's feasibility. All the assumptions summarized above produced adequate returns over a 47-month simulation period (the length of time needed to fully amortize all loans in the portfolio). Figure 2 below shows net monthly cash flows (mortgage payments and fees to the OSU less payments to the banks less cost of operations) over the simulation period.

Figure 2



On a cumulative cash flow basis, this scenario "breaks even", that is, there is no surplus or deficit after all loans are paid. The cumulative cash flows are charted below:

Figure 3

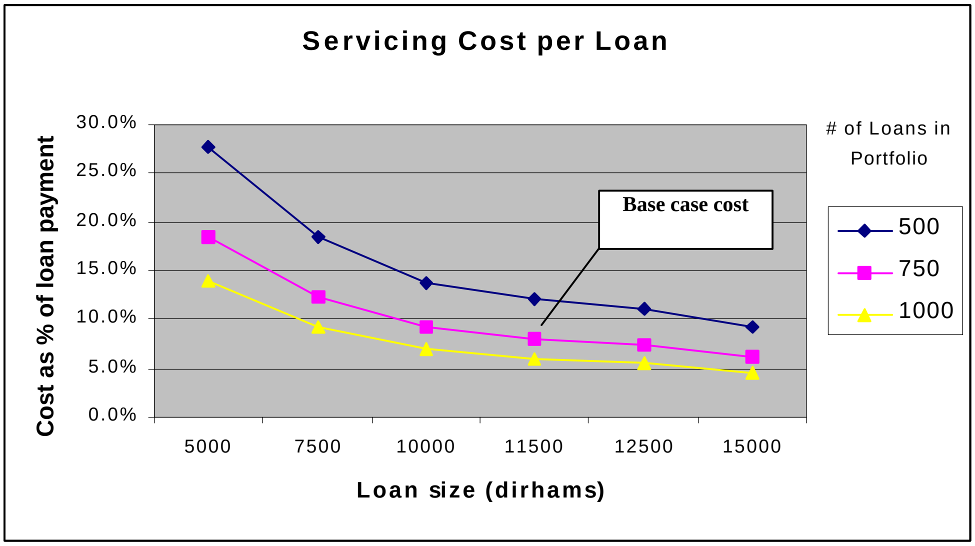


What this base case simulation demonstrates is that given the assumptions from above, the proposed design should perform as intended, that is, loans will be granted, serviced and repaid, the banks repaid without incurring significant losses <u>or</u> significant surpluses. This assumes no delinquencies and or other factors that would affect cash flows.

The simulation also highlights some critical areas of concern. Servicing costs will play a key role in determining the success of the pilot project. In effect, the surplus shown in figure 3 represents accumulation of the loan loss reserve since these surpluses are net of payments to the banks and general and administrative expenses (they do include the origination fees, but these accrue only temporarily in our example). It is these reserves that are eroded as the marginal cost of servicing a loan rises each time a loan is taken out of the portfolio (is paid-off). Eventually, administrative expenses exceed the net operating margin (income from loans less payments to banks). The net cash flow chart highlights points in time where these factors come into play.

There is an important correlation between servicing costs, number of loans serviced, and average loan size as it relates to financial viability. The following chart, taken from data in table 3, depicts this relationship:

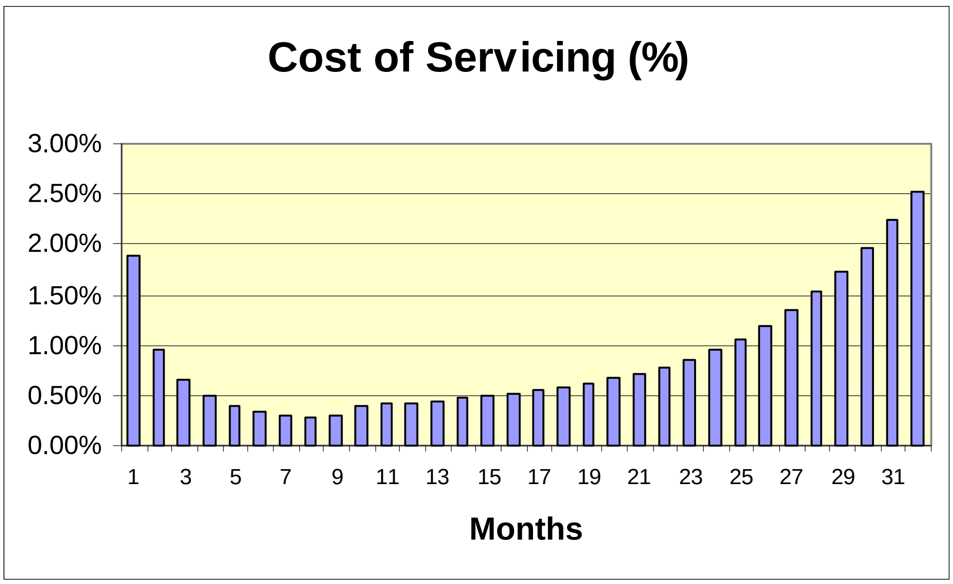
Figure 4



The 8% servicing fee (as a percent of monthly borrowers' principal and interest payments) was derived based on the survey data results for credit demand, the number of loans contained in the pilot project, and the anticipated minimum costs of operating the OSU. This is the data point illustrated above and highlighted as "base case cost". Note, however, how servicing costs change dramatically when either the number of loans in the portfolio or the average loan size change. Clearly, the objective of the OSU will be to have their credit agents operating as efficiently as possible during the servicing period. For purposes of illustration, if one credit agent can service a maximum of 200 average loans (loans exhibiting normal collection difficulties) per month, then four credit agents should be able to service 800 loans per month. As the loan portfolio grows to the base case of 750 over an approximate 8-9 month period, the credit agents would be underutilized and not working efficiently during this "ramp-up" period. Consequently, the costs of servicing each loan would be very high during this period and then would fall close to the 8% fee target after the full portfolio were established. Likewise, as loans are paid off and removed from the portfolio, marginal servicing costs would rise unless the OSU reduced costs (e.g., eliminate credit agents) to compensate. This is difficult to do for it would place excessive pressure on the remaining service agents to perform above their rated capacity over periods of time.

Universally, financial institutions will attempt to optimize the size and costs of their servicing units to bring the unit's cost expressed as a percentage of portfolio size to a measurable industry standard (i.e., 0.50%). Microfinance presents a unique challenge to this practice because of the inherent small size *and* short terms of individual loans. For our base case, the OSU will achieve a low 0.36% cost of servicing:portfolio size ratio for only a brief period of time. ***The base case shows that the OSU will average a ratio of 0.82% over the simulation period***. The figure below graphs the cost ratio over the simulation period. This exercise demonstrates the key effect of servicing costs and the need to optimize loan sizes and portfolio sizes against these costs. The pilot project should further demonstrate this to better effect.

Figure 5

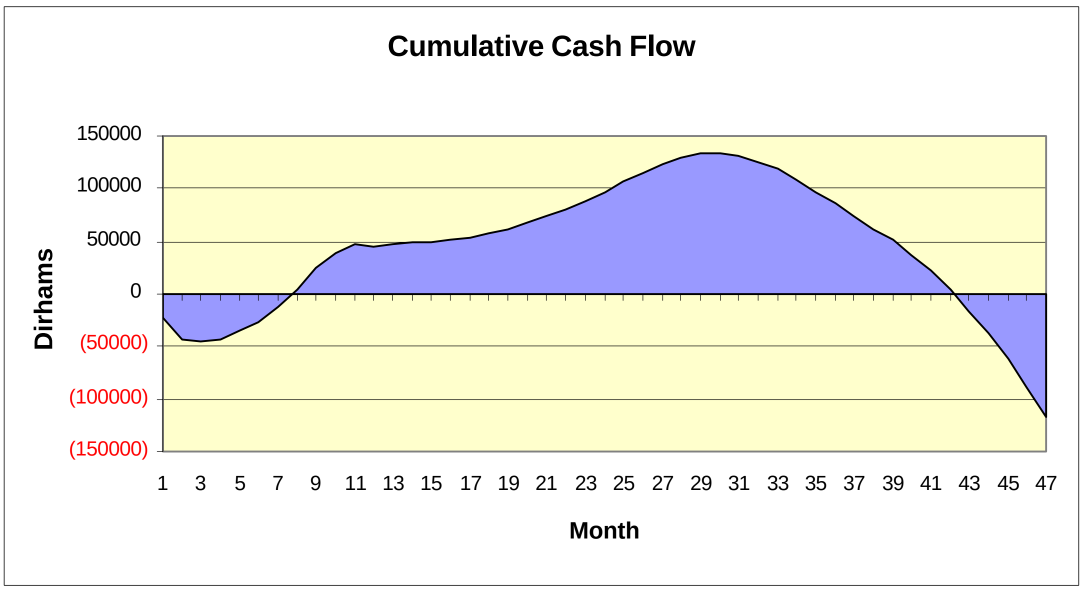


Credit Risk Effects (Late Payments and Defaults): In most financial institutions, once loan accounts become 90 or more days delinquent, the loan is classified as "non-performing". In short, at this point the loan is written off the books and foreclosure efforts are begun. For modeling purposes, this is the procedure we have followed (in reality, especially in microfinance settings, it is more likely that the institution will work more closely with delinquent borrowers to either reschedule the loan or find some common ground that avoids the finality of foreclosure). Thus, when modeling delinquency (late payments up to 90 days) the model performs well, as the three-month delinquency reserve fund is on hand to cover these shortfalls. However, when the loan goes into default (non-performing), this reserve fund is not available to cover additional losses. At this point, the OSU will be responsible for paying to the bank the full amount of the unpaid balance of the defaulted loan. The OSU will be eligible to collect 50% of that amount from the DCA insurance program, thus the OSU will have to use the accumulated cash flow surpluses (provided through the 3% capital reserve fund built into the retail lending rate) to cover the other 50%.

The figure below demonstrates the effects of just a 3% default rate on the portfolio (23 out of 750 loans).

Figure 6

Base Case—3% Default Rate



Interestingly, the losses that accrue in this scenario are due primarily to the 23 loans taken out of the portfolio and which no longer contribute a monthly servicing fee or the capital reserve fund portions of the interest margin. Again, to demonstrate the critical effects of servicing costs, if an OSU's loan portfolio is raised to the 1,100 loan level, the portfolio performs exceptionally well, even considering a 3% default rate. Indeed, the 1,100 loan portfolio could tolerate a very high 7% default rate without accruing negative cash flows.

This cash flow modeling exercise demonstrates the need for the OSUs to concentrate maximum effort in keeping servicing expenses as low as possible in relation to portfolio size and average loan size. Given the estimated costs of running the OSU, it would appear that, on average, an OSU will need to originate a *minimum* of 750 loans, averaging 11,500 dirhams to stay financially solvent over the loan recovery period. Increased average loan sizes and loan terms will improve financial feasibility. Larger loan portfolios create even greater positive effects.

The pilot project will effectively demonstrate marginal costs of servicing, loan mix realities (size, terms), and delinquency default rates. This experience will assist in developing effective business plans for broader MFI intervention in the low-income housing sector.

Technical and Capital Assistance:

Technical Assistance:

Prior to commencing operations, the OSU technical assistance and training effort should include the following planning objectives (including methods of achievement):

Objective	Methodology
Develop an implementation plan that stresses minimizing servicing costs from the outset	• Develop more stringent underwriting standards to minimize future problem loans • Carefully screen credit agent applicants to select most qualified and efficient • Carefully budget other costs
Carefully monitor originations to better estimate eventual average loan size and portfolio size	• Establish information reporting system • Target size and number of loans to originate and attempt to meet these quotas
Readjust servicing costs so that the projected cost:size ratio falls below the modeled 0.80% "ceiling"	Find methods to increase credit agent efficiency: • Automation • Part-time agents • Replace paid-off loans or problem loans with new loans
Develop a fast-track solution to handling problem loans	• Work with solidarity groups • Implement borrower awareness program at the time the loan is originated • Implement alternatives to "foreclosure" that keeps cash flows moving

	• Develop cost recovery method in the event of foreclosure that reimburses OSU shortfalls

Probably the most important element of USAID technical assistance will be a resident advisor familiar with both the techniques of providing shelter for low-income populations and managing micro credit operations.

The resident advisor will:

- support the coordination of the activities of the several participating organizations (ANHI, the banks, OSUs and parent MFIs) as the pilot project is launched and proceeds;
- develop the loan origination and servicing manuals for the OSUs;
- develop the manual for loan pool assembly and cash flow management, including the management of the delinquency reserve fund;
- develop the monitoring and evaluation plan for the project and serve as the principal agent for collecting the data and documenting the experience generated by the pilot project;
- determine the need for and schedule the supply of short-term technical assistance during the life of the pilot project.

The most innovative aspect of the pilot project is the pooling of micro loans and the management of the cash flow from those loan pools in a way that makes the micro loan portfolio mimic loans of a size which banks are accustomed to granting. This approach anticipates a time when banks and other financial institutions will be investors in these loan pools, much as financial institutions in the United States invest in mortgage-backed securities created by conduits such as the Federal National Mortgage Association by pooling numerous individual mortgage loans. Consequently, the type of technical assistance most likely to be required relates to this activity.

It is anticipated that the MFIs involved in the pilot project will have sufficient experience with lending to the target population to handle most of the special training needs for the additional personnel hired to man the OSUs. Whether or not it would be desirable for these or other personnel of the OSU/MFI or the banks require off-site training in micro finance and/or the special techniques of loan pooling and loan pool cash flow management can be determined by the resident advisor in coordination with USAID.

Table 8 contains rough estimates of the technical assistance and training requirements anticipated during the life of the pilot project.

Table 8

Estimated Technical Assistance and Training Requirements

Resident Advisor	18 to 24 person-months
Short-term Technical Assistance on Financial Management	3 person-months
Local technical assistance support	12 person-months
Off-site Training for OSU Staff, 4 persons	4 person-months

Capital Equipment:
It is anticipated that USAID may choose to support the capital equipment needs of the OSU by supplementing what surplus material the parent MFIs may be able to supply.

Each OSU office will require the following capital equipment:

Table 9

Capital Equipment Requirements for the OSU

Desk-top Computers	1-2 per office
Printers	1 per office
Office Furniture (desks, chairs, work tables)	3 sets per office
Vehicles (motorcycles)	3 per office

The costs for this equipment have been identified in the initial set-up costs of the OSU and accounted for in the cash flow analysis. To the extent that these costs are provided for under a grant from either USAID or the parent MFI, the cash flow for the operations of the OSU will be improved.

Pilot Project Implementation Schedule

The Pilot Project is expected to last until at least 1,100 loans have been originated. As the time required for set up and staffing of the project, the first loans will be made 6 months after the launch of the pilot project. It is estimated that all 1,100 loans can be originated at the rate of 100 loans a month, so that all 1,100 loans can be disbursed in the ensuing 11 months. The minimum maturity of the loans is expected to be two years. Some loans will therefore begin to be satisfied (fully repaid) 30 months after the launch of the pilot project. At that time, a decision will need to be made as to whether or not to bring the program to full operational status because if the loans being repaid are not replaced in the portfolio, cash flows will decline and steps will have to be taken to scale down and eventually terminate the project.

It is firmly believed that sufficient information will have been developed before that time to make this decision. Consequently, it is assumed that the start-up phase of the project will last approximately 6 months and that at the end of 18 months, a preliminary evaluation which can serve as the basis for a determination of whether the project should continue.

The implementation schedule presented below focuses primarily on the tasks to be undertaken in the start-up phase of the pilot project (for a more detailed schedule, please refer to Appendix F: Scope of Work for Phase II):

Activity Name	Start Date	Finish Date
Recruit and Hire Resident Advisor	4/29/01	7/12/01
Resident Advisor Arrives at Post	8/1/01	
Develop M&E plan	8/1/01	9/26/01
Prepare and execute documents establishing OSU as NGO sub	4/29/01	6/12/01
Prepare and execute documents establishing OSU as bank agent	6/17/01	8/18/01
Assign/acquire office space	5/1/01	5/31/01
Recruit OSU Staff		
Coordinator	5/15/01	6/5/01
Office Manager and Credit Agents (2)	5/15/01	6/23/01
Additional Credit Agents (2)	5/1/02	5/31/02
Train staff		
Develop Origination and servicing manuals	6/3/01	8/4/01
Develop procedures for cash flow management and accounting	6/3/01	8/4/01
Develop all forms	6/1/01	8/3/01
Establish Bank accounts	7/4/01	7/25/01
Advertise and solicit loan applications	7/29/01	12/27/02
Process loan applications	8/1/01	12/31/02
Approve loans	8/13/01	12/31/02
Establish mutual accounts (delinquency reserve)	8/13/01	12/31/02
Inspect construction site	10/12/01	12/31/02
Disburse loans	11/13/01	12/31/02

Timeline: 2001: Apr May Jun Jul Aug Sept Oct Nov Dec; 2002: Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec

Total Cost per Week

APPENDIX A: Terms of Reference

Establishing Mechanisms for Housing Microfinance Pilot Project in Morocco

(May 10 Version as amended by Memorandum of January 19, 2001)

Article I - BACKGROUND

Access of low-income households to credits to finance development of housing plots is now receiving the attention of public authorities, NGOs and international organizations. Indeed, while substandard housing interventions resulted in better housing and increased access to public services and infrastructure for numerous population groups, some households--particularly the most disadvantaged with no fixed and regular incomes--face difficulties developing their housing plots due to several constraints, including among others:

The high cost of credit.
The extremely limited contributions of the banking system to low-cost housing finance, e.g., credit is only available to households with regular incomes providing a reliable guarantee against the loan granted.

The primary effects of this situation are:

The delay in site development which may take up to 11 years for plots of home improvement.
The transfer of plots serviced by the Ministry of Housing to third individuals and their introduction in the speculation channels. These are reintroduced in the market by private intermediaries, who withdraw substantial profit.

Consequently, the present situation urgently requires actions likely to mobilize the capacities of the central government, banks, local governments and donors in order to establish the appropriate mechanisms for offering to the poorest urban population access to credit for housing purchase or improvement. Such credit would be similar to microcredit for income improvement--even if amounts, periods and mechanisms could be different. In this context, USAID/Morocco plans to conduct a pilot activity. A previous study titled “Application of microfinance in housing construction and improvement” undertaken by USAID in November 1999, shoed the feasibility of the microcredit system for financing low cost housing for the poorest households, and recommended to test the system through the pilot project.

A low-cost housing neighborhood in the Wilaya of Agadir was selected as the pilot project site for the following reasons:

> The proportion of residents within the target group in terms of income is significant, about 64%.
>
> Self-employment prevails, generating over 50% of household revenues, which offers an opportunity to test the methodology with a population group that is not served by the traditional financing system.
>
> The program could start with small loans to purchase a land plot and later on extend further loans for housing building.
>
> The high expectations as for additional revenues associated to housing, either rental revenues or from a microenterprise.
>
> A large proportion of the residents that desire to receive housing loans is willing to provide a mortgage on the concerned property.
>
> The age of the household head and his wife is low on average.

Article II - OBJECTIVE OF THE CONSULTANCY

The objective is to define: 1) the institutional and financial scheme of a microcredit system for financing low cost housing and 2) the most appropriate manner to apply tools and mechanisms (guarantee fund, solidarity groups, . . .) as well as the system operating procedures, its structure and its management. Based on this, a pilot project will be developed.

Article II—STATEMENT OF WORK OF THE STUDY PHASES

Phase 1:

Task 1.

During this phase, the consultants will gather and examine the existing data and information on the population of the selected site, in particular household incomes, household savings, housing expenses, reimbursement capacity, personal financing capacity, financing needs and potential guarantees (title deed, personal security, mutual security for the overall selected site or for a street or neighborhood).

Task 2.

The contractor will carry out necessary surveys for the non-available data and will analyze survey results. The survey will take place in the Wilaya of Agadir, specifically the city of Tikiouine, representing different types of housing structures, and where no less than three hundred households will be interviewed. Besides the quantitative survey, the contractor will conduct qualitative interviews of up to fifty households and meet with about ten key institutions involved in the sector. The consultants should work closely with the Ministry of Habitat to obtain the collaboration of the public authority.

Task 3.

Based on the collected data, the consultants will define the characteristics of the microcredit program to be established (period, amount . . .), the fee structure (initial rate, terminal rate . . .), overall financing needs, financing sources (beneficiaries, credit institution, government . . .), the guarantee institution and/or system to be put in place, and will develop an annual financing and depreciation plan. To this end, specific tasks to be developed under Task 3 are:

For the institutional scheme:

1. Identify possible partners in the program to be established to implement the pilot project.
2. Define the responsibilities and roles of each partner (specify the cooperation, contribution ad partnership terms among public, private and NGO partners).
3. Define the channels and procedures to be established to have the program operate.
4. Identify policy and regulatory constraints to the development of microfinance for housing. Suggest in priority order the changes necessary for a functioning system. Provide draft language for text changes to policy and regulatory documents.
5. Identify types and task of local and/or expatriate technical assistance that would accompany the recommended institution in implementing the pilot activity.
6. Develop a Performance Monitory Plan; Marketing Plan; and Impact Assessment.
7. Identify the Management Information System development needs for the loan follow-up and credit marketing.
8. Identify the staffing and training needs.
9. Propose tactics to deal with defaults.
10. Identify which risk reduction mechanism to adopt.

Identify critical assumptions to the success of the pilot project and beyond.

For the financial scheme:

1. Examine the financial feasibility of the microcredit program (interest rte, revenues, cost recovery, capital requirement, break-even point), and develop annual financing plans.
2. Propose a technical and financial scheme for the pilot project, including the required budget, how to fund it, as well as the operation plan and its recurrent cost.
3. Propose a viable fee structure as well as the loan application and recovery procedures.
4. Propose incentive measures for implementation to make housing micro-credit attractive for the banking sector.
5. Identify and propose the specific guarantee system most appropriate for housing micro-loans.
6. Determine the local currency and foreign exchange requirements for the pilot project and beyond.
7. Propose funding and management procedures for the guarantee institution/fund to provide for start up, sustainability and efficient operations.

Task 4.

The consultants will draft a memorandum of understanding (and other agreements) between the identified partner(s), and if necessary between the latter and USAID; set up the pilot project; and provide a series of institutional/financial scenarios.

Task 5.

The team leader will organize an observational study tour for potential key partners (4 participants at the most) to a country that will be selected jointly with USAID, which has a long experience in microfinance for housing. The contractor needs to propose the organizational delivery of the study team (place, logistics, expert in place to accompany the group). The trip should not take more than 10 days, including travel time. A trip report of the outcome of the study tours will be produced by the contractor.

Task 6.

The contractor will hold at least two roundtable discussions. The first will be sometime in the middle of the study, and gather mainly members of the working group constituted of USAID, Secretary General of Habitat, Banque Centrale Populaire, Ministry of Finance, and Ministry of General Affairs. The second will possibly be held in Agadir after the distribution of the draft report, and will assemble for a half day all the resource persons of potential partners interviewed at the time of the study development. The participant recommendations will be noted in the final report.

<u>Phase 2 and 3:</u>

The implementation of Phase 2 (the technical assistance during the implementation of the pilot project) is not within the requirements of the present Scope. Once the program has been developed, the Mission will solicit the services of experts, probably the same consultants, for Phase 3, to evaluate and analyze the results of the pilot project, and recommend how to extend throughout the country the housing microcredit program developed and tested in Phase 2.

Article IV—METHODOLOGY

1. **Document Review:** Much information is contained in the study "Application of microfinance in housing construction and improvement" undertaken by USAID in November 1999. Other pertinent documents will be assembled by EG and EUP offices and will be available to the team.
2. **Meetings/Interviews:** Initially, the consultant will conduct interviews with the resource persons within the Secretariat d'Etat of Housing and their agencies, the Ministry of Economy and Finance, Ministry of General Affairs, banks, the Central Guarantee Fund, NGOs, and any other potential partner at the time of the study development.
3. **Site Visits:** Rabat, Agadir.

Article V—RELATIONSHIPS AND RESPONSIBILITIES

The Office of Economic Growth (EG) will oversee the study. The team will work under the guidance of and report to designated EG and EUP office representatives.

Article VI—TEAM COMPOSITION, QUALIFICATIONS, DUTIES

The assessment for phase one requires three technical specialists, and expert(s) on a periodical basis for very specialized topics, with a broad range of significant experience relevant to microfinance for housing and the various social science issues to be addressed.

1. **Microfinance Housing Expert (Team Leader):** Specialist in exploring models for making microfinance housing credit available to families below the median income level; related policy reform; analysis of institutional opportunities; constraints, political/cultural organization. The expert should have an extensive field research experience demonstrated by appropriate publications or reports.
2. **Local Financial/Economist:** Expert in the formulation of the microfinance housing credit program and project finance mechanisms, lending methodology, calculation of

estimated risk factors using various standard risk assessment models; knowledge of Moroccan cooperative system, and low cost housing program financial and economical issues.

3. **Local Social Scientist:** Extensive knowledge of Morocco's social structure, traditional economic organizations, capacity building, traditional credit systems, and broad experience in hiring, training, and supervising a team to carry out and analyze surveys. The team of surveyors will conduct the quantitative surveys. The qualitative surveys of about fifty households will be undertaken by the social scientist.

The team leader may decide, in agreement with USAID, to call for other local experts to deal with specific issues such as institutional arrangements, legal aspects, and other special topics.

The team leader should have at least 10 years experience in planning, managing, and/or designing microfinance in housing or other relevant activities in developing countries.

The international consultants must have fluent French and English language spoke and demonstrated writing skills.

Team Leader: The Contractor will propose the Team Leader and desegregate specific responsibilities of each team member.

The Team Leader will manage preparation of the study work plan, assure that all tasks are adequately addressed, assemble and submit the final report in both French and English. An additional week (five days) of his/her time will be allocated to the workdays at home office.

Article VII—PERIOD OF PERFORMANCE

The study will be conducted in Morocco. The total number of workdays estimated for this phase is 213. The exact time, team composition, qualifications, and duties of Phase Two implementation will be determined in the Phase One study report. The workdays for Phase One are divided as follows:

Position	Work Days	Requested Dates
Microfinance Housing Expert/Team Leader	60 days	
(workdays at home office)	5 days	
Local Financial/Economist Expert	40 days	
Local Expert (Social Scientist)	40 days	
Team Surveyors	50 days	(TBD by Team Leader)
Expert periodical actions if needed	15 days	

Total Number of Work-days	210 days
Travel Days	3 days
Total Number of Workdays Ordered	213 days

The study is expected to begin o/a June 20, 2000 and be completed in Morocco o/a September 30, 2000. In the light of Moroccan vacation schedules during the month of August, work may be postponed at the discretion of USAID and the team leader. The Team Leader will be given five additional days at his/her home office to complete editing of the report.

Article VIII—REPORTS AND DELIVERABLES

1. Submission of Reports: Draft and final reports will be submitted to the USAID designated EG and EUP office representatives.

2. Draft Report: The Team Leader will provide 15 copies of a draft study report with an executive summary in English no later than three working days prior to the final debriefing. USAID and key partners will review the draft report and provide the team with comments for incorporation into the final report on the day of the final debriefing.

3. Final French Report: To be submitted no later than two weeks after final debriefing.

4. English Summary Report: The English summary report translation of the final report should be submitted at the same time than the final report. The complete translation in English of the final report will be submitted to USAID two weeks later.

5. Study Tour Report

6. Organization of at least two roundtables with the working group and key partners

7. Memorandum of Understanding between USAID and the identified partner(s)

8. SOW of Phase 2 for the pilot project evaluation tested in Phase 1, and determine criteria for expansion beyond pilot plan

9. Summary

Deliverable	Due Date
Work Plan and Schedule	2 work-days after arrival in Morocco
Draft Report	3 work-days prior to de-briefing
De-briefing with USAID	1 work-day prior to departure from Morocco of the Team Leader
Final Report (20 copies)	2 weeks after final debriefing
Diskette with Final Report and important work documents	
Final English Translation of the Report (10 hard copies and a diskette)	4 weeks after final debriefing

The work plan will be critical in demonstrating the team's understanding and prioritization of the work to be accomplished, will consolidate tasks, describe the individual responsibilities of team members, and define in some detail the final product (the feasibility study report).

The Draft Report should include an executive summary of the key findings and recommendations for review by key GOM personnel and other Moroccan partners.

The Final Report will clearly describe the recommended actions for USAID and the potential partners.

The Report should follow standard USAID format. It will include:

a) An *Executive Summary*, containing a concise summary of the most critical elements of the study findings. This section should also include an abbreviated timeline for action on the most pressing issues and be written in such a way that individuals unfamiliar with the Activity can readily comprehend its basic elements and how the findings from the study relate to these elements;

b) A *Table of Contents;*

c) The *Body*, not to exceed 60 pages, is expected to include:

- The purpose and principal issues addressed by the study (brief);
- The economic, political and social context of the Activity (brief);
- Team composition and study methodology (three pages maximum);
- The findings of the study, based on the questions and areas of investigation detailed under Article IV Statement of Work;
- The Conclusions, in succinct language, drawn from the findings;
- The recommendations and criteria for expansion beyond pilot project;

- The lessons learned from the study.

d) *Appendices*, to include a copy of this Scope of Work; the questionnaire used in the survey, a list of documents consulted as well as individuals and agencies contacted; the study methodology; the study tours report, the roundtables report, the SOW for Phase 3 and, as appropriate, more detailed discussions of specific methodological or technical issues.

The body of the Final Evaluation Report is to be translated into English by the Contractor as part of this work order.

Memorandum

To: Jamal Dadi, USAID/Rabat
From: Bruce J. Purdy, Abt Associates
Subject: Review of the Microcredit for Housing in Morocco Program
Date: 19 January 2001

This memorandum sets forth a summary of our recent discussions over the course of the last several days with regard to the appropriate completion of the Microcredit for Housing Program Task Order being conducted by Abt Associates under the auspices of the SUM IQC (LAG-1-801-99-00007-00). In order to finalize this task order to the satisfaction of USAID/Morocco and to meet all of Abt Associates contractual obligations, the following initiatives will be undertaken prior to April 30, 2001.

Statement of Work

Phase 1:

Task 3: Institutional Scheme

Abt Associates will retain the services of a professional microcredit for housing finance specialist to work directly with Dr. Ernst to review/revise the Draft Institutional and Legal Documents produced under Task 3 from the Scope of Work. This individual will work with Dr. Ernst to reassess institutional alternatives/options for microcredit scheme in Morocco beyond the banking sector and with/without the appropriate amendment to the 1999 Microcredit Law. The alternatives analysis will consider innovative international microcredit for housing schemes which have been found effective in other institutional settings and which could ostensibly prove practical and workable in the Moroccan context. Such innovative alternatives/options which could possibly be considered include, but are not limited to, some combination thereof of commercial banks/NGO/MCI partnerships, etc. This work will be completed by the third week of March, 2001.

Abt Associates will make appropriate additions/revisions, specifically with regard to Subtasks 6, 7, 8 and 11. This work will be completed by the third week of March, 2001.

Task 3: Financial Scheme

The current draft document, Microcredit for Housing in Morocco: A Financial Simulation, considers only one alternative, the commercial banking sector, as a viable alternative for microcredit lending for housing. Abt Associates will review/revise this document to reflect additional institutional options/alternatives for microcredit lending which will be described in the institutional/legal document as noted above. “Hypothetical” financial scenarios/case studies for each of these new options will be prepared in addition to the existing commercial banking option described in the draft document. These “hypothetical” financial scenarios/case studies will be prepared with the realization that the current amendment to the 1999 Microcredit Law has not been passed by the Moroccan Parliament. Based on this financial analysis, Abt Associates will also recommend a “preferred alternative” for microcredit lending. This work will be completed by the third week of March 2001.

Abt Associates will review/revise the current draft document to complete/edit Subtasks 1, 2 and 3. This work will be completed by the third week of March, 2001.

Abt Associates will work directly with the USAID/Rabat Mission on Subtask 5 to determine whether or not a DCA representative should come to Morocco to advise the Mission/Moroccans on specific guarantee systems.

Task 4: Memorandum of Understanding

Abt Associates will establish a “generic” Memorandum of Understanding (MOU) to be used by the Mission should partnerships be formalized and agreement reached on potential institutional arrangements for microcredit lending. This MOU will be prepared by the first week of April, 2001.

Task 5: Study Tour

Abt Associates will organize/conduct a study tour for Moroccan officials. Abt Associates will deliver a memo to USAID/Rabat which describes possible study tour destinations and the “preferred destination.” Once the study tour has been conducted, a trip report will be produced. The study tour will take place in mid April, 2001.

Task 6: Round Tables

Abt Associates will conduct two (2) roundtables, one at the end of March, 2001, and one at the end of April, 2001. The March round table will be held in Rabat and the April round table will be held in Agadir. Abt Associates will work with USAID/Rabat to undertake all logistical and technical support to successfully complete the two round tables.

Appendix B: Survey Questionnaire

To obtain more detailed information on the potential clientele for a housing microfinance pilot project, the study team conducted a household survey in the ANHI project area with a target sample of 300 households. The population of interest includes households that are still living in a bidonville section that has yet to be demolished, Bidonville Resettlement Program (BRP) household that have acquired and moved to their assigned lots (including household who purchased their plots from the original attributaires, with the houses in different stages of completion, and program clients who have moved somewhere else. Some of them have actually acquired their assigned lots and have started construction while others have not.

In preparation for the survey, conducted by a Rabat-based research organization, EDESA, the team canvassed the 1,043 BRP plots scattered across the ANHI Tikiouine development in two areas—Assaka and Zaïtoune. The survey included most of the residents of the remaining bidonville adjacent to the development (90 respondents). Among the households that have moved and whose bidonville baraques (hovels) have been demolished, the survey included 221 out of the 357 living on the BRP plots, with their houses either under construction (310) or with construction completed (47). BRP clients living somewhere else, with their plots either vacant (377), under construction (300), or with construction completed (9), were in effect excluded for the survey. The latter groups were included in follow-up focus group sessions.

The total survey sample of 311 households is distributed across the following groups:

Bidonville	90
Assaka	73
Zaïtoune	148

The survey involved interviews with the heads of households. The interviews used the questionnaire displayed below which was based on an analysis plan which called for information on the needs and financial capabilities of the target households, as well as general background information.

The survey took place in the early part of August 2000.

The survey team discussed several of the key issues in greater detail in a series of focus group sessions with selected household groups:

- female heads of households
- heads of households with vacant plots (*lots nus*)

- heads of households having completed construction and living on their plot
- heads of households living in partially completed homes
- heads of households having completed construction but not living on their plot
- heads of households in areas affected by restructuring/upgrading
- heads of households who have received a microcredit, and
- heads of households in the bidonville section.

The focus group sessions were conducted in early October, 2000, in an effort to explore specific issues in greater depth. The discussions, held in Arabic, have been taped and partially videotaped. The tapes are available for review.

The Questionnaire

ABT ASSOCIATES INC	
STRATEGIE ET SOURCES DE FINANCEMENT	
PROJET DE RELOGEMENT A TIKIOUINE	
QUESTIONNAIRE MENAGE-BENEFICIAIRE	**Identifiant I__I__I__I__I__I__I__I**
Questions	**Réponses**
A- IDENTIFICATION	
A 1- N° du lot attribué A (Assaka)	I__I__I__I__I Date d'attribution : Année I__I__I Mois I__I__I
Z (Zaïtoune)	I__I__I__I__I__I
A 2 - Nom et Prénom du C.M	
A 3 - Adresse actuelle	
A 4 - Lieu d'enquête	Lotissement I_1_I Bidonville I_2_I
A 5 - Nombre de logement construit	Occupés I__I Non occupés I__I
A 6- Nombre de locaux professionnels	Occupés I__I Non occupés I__I
A 7 -Nombre de ménages dans la construction	Attributaire originel I__I Acquéreur non attributaire I__I
	Locataire I__I Autre I__I Total I__I
A 8 - Acquéreur non attributaire a acheté	Parcelle I_1_I Logement inachevé I_2_I Logement achevé I_3_I
B- MEMBRES DU MENAGE ENQUETE	
B 1 -Nombre de personne dans le ménage	I__I__I

B 2 - Répartition par sexe et par âge	Age	M	F	T
	< 20 ans			
	20 - 59			

	60 et plus				
B 3 - Nombre de personnes occupées	Age	M	F	T	Mombre du ménage
	< 20 ans				
	20 - 59 ans				
	60 et plus				
C - CHEF DE MENAGE					
C 1- Age (en année)	I__I__I				
C 2 - Lieu de naissance	Tikiouine I_1_I Grand Agadir I_2_I Souss I_3_I Ailleurs I_4_I				
C 3 - Résidence antérieure	Tikiouine I_1_I Grand Agadir I_2_I Souss I_3_I Ailleurs I_4_I				
C 4 - Durée de résidence à Tikiouine (en année)	I__I__I				
C 5 - Situation matrimoniale	Célibataire I_0_I Marié I_1_I Autre I_2_I				
C 6 - Type d'activité	Actif occupé I_1_I Chômeur I_2_I Inactif I_0_I				
C 7 - Profession					
C 8 - Lieu de travail	Tikiouine I_1_I Grand Agadir I_2_I Souss I_3_I Ailleurs I_4_I				
D- LOGEMENT ACTUEL					
D 1-Date de commencement des travaux	Année I__I__I Mois I__I__I				
D 2 - Date d'achévement des travaux	Année I__I__I Mois I__I__I				
D 3- Etat de la construction	Achevé I_2_I Inachevé I_1_I Lot nu I_0_I				
D 4 - Etat d'avancement des travaux	Fondations I_0_I RDC I_1_I Etage 1 I_2_I Etage 2 I_3_I				
D 5- Nombre de pièces actuellement	I__I__I				
D 6 - Consistance finale(nombre de pièces)	I__I__I				
D 7 - Superficie du lot(en m_)	I__I__I__I				
D 8 - Superficie construite (en m_)	I__I__I__I				
D 9 -	Type	Oui I_1_I	Non I_0_I		

Raccordements				
	Eau			
	Electricité			
	Egouts			
	Téléphone			

E- DUREE ET SOURCES DE FINANCEMENT DE LA CONSTRUCTION					
Etapes	**Durée (mois)**	**Sources de financement**			
		Fonds propres du ménages	**Emprunt (famille, amis...)**	**Prêt bancaire**	**Autres sources**
E1- Fondations	I__I__I				
E2- RDC	I__I__I				
E3- Etage 1	I__I__I				
E4- Etage 2	I__I__I				
E5- Etanchéité	I__I__I				
E6- Raccordement aux réseaux	I__I__I				

F- COÛT DU LOGEMENT	
F1- Coût du lot	I__I__I__I__I__I DH
F2- Coût de la construction	I__I__I__I__I__I DH
F3- Coût des branchements(Eau,Eléc,Assainissement,Téléphone)	I__I__I__I__I__I DH
F4- Autres frais(frais fonciers,services,autorisations diverses,autres)	I__I__I__I__I__I DH
F5-Total	I__I__I__I__I__I DH

G- OPERATIONS FUTURES DE CONSTRUCTION				

Opérations	Période prévue		Montant estimé	Sources de financement				
	mois	année		Fonds propres	Emprunt	Prêt	RME	Autres
G1- Fondations	I__I__I	I__I__I	I__I__I__I__I__I	I__I	I__I	I__I	I__I	I__I
G2- RDC	I__I__I	I__I__I	I__I__I__I__I__I	I__I	I__I	I__I	I__I	I__I
G3- Etage 1	I__I__I	I__I__I	I__I__I__I__I__I	I__I	I__I	I__I	I__I	I__I
G4- Etage 2	I__I__I	I__I__I	I__I__I__I__I__I	I__I	I__I	I__I	I__I	I__I

H- EQUIPEMENT EXISTANT DU LOGEMENT ET DU MENAGE

Nature de l'équipement	Source de financement				
	Fonds propres	Emprunts	Prêt	RME	Autre
H1- Ameublement					
H2- Cuisinière					
H3- Réfrigérateur					
H4- Four à pain					
H5- Lave-linge					
H6- Radio					
H7- Poste TV					
H8- Parabole					
H9- Vidéo					
H10- Chaine de musique					
J11- Vélo					
H12- Vélomoteur					
H13- Voiture					
H14- Autre véhicule					

J- DEPENSES DU MENAGE	
J1- Dépenses ordinaires au cours de l'année dernière	

J1.1 : Alimentation	I__I__I__I__I__I DH
J1.2 : Habillement	I__I__I__I__I__I DH
J1.3 : Loyer	I__I__I__I__I__I DH
J1.4 : Eau, électricité	I__I__I__I__I__I DH
J1.5 : Scolarisation des enfants	I__I__I__I__I__I DH
J1.6 : Hygiène et santé	I__I__I__I__I__I DH
J1.7 : Autres	I__I__I__I__I__I DH
J1.8 : Total	I__I__I__I__I__I DH
J2- Dépenses extraordinaires au cours de l'année dernière	I__I__I__I__I__I DH
J2.1 : Grandes cérémonies familiales	
(mariage, circoncision, naisance, décès…)	I__I__I__I__I__I DH
J2.2 : Voyage	I__I__I__I__I__I DH
J2.3 : Hospitalisation	I__I__I__I__I__I DH
J2.4 : Pélérinage/ Omra	I__I__I__I__I__I DH
J2.5 : Fêtes religieuses (Aïd Lakbir, Aïd Sghir,	
Ramadan, Mouloud, Achoura)	I__I__I__I__I__I DH
J2.6 : Autres	I__I__I__I__I__I DH
K- EPARGNE	
K1- Essayez-vous d'épargner de l'argent ?	
I_0_I Non	I_1_I Oui
K2- Avez-vous réussi à épargner une somme d'argent ?	
I_0_I Non	I_1_I Oui
Si oui, posez les questions M3 à M6	
K3 - Montant épargné avant l'acquisition du lot I__I__I__I__I__I DH	
K4 - Montant épargné avant lancement des travaux de construction	

I__I__I__I__I__I DH	
K5 - Epargne actuellement disponible I__I__I__I__I__I DH	
K6 - Mode d'épargne	
I_0_I pas d'épargne	
I_1_I achat or + bijoux	
I_2_I Caisse d'épargne	
I_3_I Banque	

L- BESOINS ET ATTITUDES VIS-A-VIS DU CREDIT				
L1- Forme de crédit souhaitée :		I_1_I Institutionnel	I_2_I Informel	I_0_I pas de crédit
L2- Montant souhaité :		I__I__I__I__I__I DH		
L3- Quand ?		Année I__I__I Mois I__I__I		
L4- Utilisations prévues :				
L4.1 : paiement du lot			Oui I_1_I Non I_0_I	
L4.2 : acquisition d'un logement construit			Oui I_1_I Non I_0_I	
L4.3 : construction			Oui I_1_I Non I_0_I	
L4.4 : équipement interne du logement			Oui I_1_I Non I_0_I	
L4.5 : autres			Oui I_1_I Non I_0_I	
L5- Désirez-vous obtenir un micro-crédit de ?				
3000 DH I_1_I	5000 DH I_2_I			
10000 DH I_3_I	15000 DH I_4_I	20000 DH I_5_I	Pas de micro crédit I_0_I	

M2- Type d'entraide dans la construction		
I_1_I Ménage seul		I_3_I Entraide de voisinage

I_2_I Entraide familiale		I_4_I Entraide amicale
Si code 2,3,4, posez question L3		
M3 : Nature de l'entraide		
L3.1 Achat de matériaux		Oui I_1_I Non I_0_I
L3.2 Main d'œuvre		Oui I_1_I Non I_0_I
L3.3 Financement mutuel		Oui I_1_I Non I_0_I
L3.4 Démarches administratives		Oui I_1_I Non I_0_I
N- GARANTIES ET MODES DE REMBOURSEMENT DU CREDIT		
N1- Quelles garanties pouvez-vous donner pour l'obtention du micro-crédit ?		
Pas de garantie		I_0_I
Titre foncier du lot		I_1_I
Autre titre foncier		I_2_I
Autre à préciser		I_3_I
N2- Avez-vous d'autres crédits à rembourser ?		
I_0_I Non	I_1_I Oui	
N3- Mode de remboursement du micro-crédit accordé :		
Mensualité		I_1_I
Par trimestre		I_2_I
Selon disponibilité		I_3_I
Autre à préciser		I_4_I
N4- Durée totale de remboursement possible : I__I__I / années		
N5- Montant mensuel possible à rembourser ? I__I__I__I__I__I DH		

P- RESSOURCES DU MENAGE (par an)

Type de rémunération et revenus			
	CM	**Autre membre de ménage**	**Total**
P1- Salaires réguliers			
P2- Revenus agricoles			

P3- Revenus fonciers ruraux			
P4- Revenus fonciers immobilièrs urbains			
P5- Autres à préciser			
P6- Transferts RME			
TOTAL			

K- EQUIPEMENT EXISTANT DU LOGEMENT ET DU MENAGE (Cocher l'existant)					
Nature de l'équipement	**Source de financement**				
	Fonds propres	**Emprunts**	**Prêt**	**RME**	**Autre**
J1- Ameublement					
J2- Cuisinière					
J3- Réfrigérateur					
J4- Four à pain					
J5- Lave-linge					
J6- Radio					
J7- Poste TV					
J8- Parabole					
J9- Vidéo					
J10- Chaine de musique					
J11- Vélo					
J12- Vélomoteur					
J13- Voiture					
J14- Autre véhicule					

ENQUÊTE PROJET DE RELOGEMENT A TIKIOUINE						
Echantillonnage sur lotissement						
N° d'ordre	**Catégorie 1 : lots nus**	**Catégorie 2 : en cours de construction**		**Catégorie 3 : construction achevée**		**Observations**
		En cours de construction (logement habité)	**En cours de construction (logement non habité)**	**construction achevée habitée**	**construction achevée non habitée**	

ENQUÊTE PROJET DE RELOGEMENT A TIKIOUINE

Echantillonnage sur bidonville

N° d'ordre	**Catégorie 1 : ménages n'ayant pas encore commencé la construction du lot**	**Catégorie 2 : Ménages ayant construit le lot**	**Catégorie 3 : Ménages en cours d'affectation du lot**	**Observations**

Appendix C: Individuals and Agencies Contacted

(individuals and agencies contacted by James W. Christian in February, 2001)

USAID/Morocco

Brad Wallach, Chief, Economic Growth
Jamal Dadi, Microfinance Activity Team Leader

Wafa Imobilier

Abdellah Fath, President du Directoire

Banque Centrale Populaire

Mohamed Larbi Rekiouak, Directeur de la Division, Marketing

Al Amana

Driss Jettou, President

Fondation Zakoura

Noureddine Ayouch, President

Ministry of Finance

Appendix D: Roundtable Report

Abt Associates Inc.

Report on the Proceedings and Results
of the Roundtable on Microfinance for Housing
April 17, 2001
USAID/Morocco

I. Background

Abt Associates Inc. was contracted by USAID/Morocco to conduct a study and develop a concept for a pilot project to test the feasibility of using a microfinance delivery system for low-income housing. The concept would use mainstream banking sources of funds and would not rely on Government of Morocco subsidies to make the program affordable. The draft final study in English was delivered to USAID/Morocco on March 30, 2001, and the French version delivered to program participants on April 12, 2001.

Part of Abt Associates Inc.'s scope of work called for a "roundtable" discussion of the report and concept between the key participants and stakeholders. The purpose of the roundtable was to further develop the concept details, air differences, discuss alternate solutions, and lay out "next steps" for prompt program implementation. The roundtable was held on Tuesday, April 17, 2001 from 9:30 AM to 12:30 PM at the USAID office in Rabat. The scope of work also called for a second roundtable, but this event was canceled by agreement between USAID and Abt Associates as the need for it was deemed negligible.

This report chronicles the proceedings and results of the roundtable.

II. Presentation

Presenter:
- Dr. James W. Christian, Abt Associates Inc. consultant; principal report author.

Support Staff:
- Mr. Howard W. Kane, Abt Associates, Inc. staff member; financial analyst.
- Mr. Jamal Dadi, USAID/Morocco; Project Officer
- Mr. Nour-Eddine Bellamine, Abt Associates Inc. consultant; Demographics and survey specialist.

Attendees:
- Mr. James Bednar, Director, USAID/Morocco
- Mr. Brad Wallach, Director, Office of Economic Growth, USAID/Morocco
- Mssr. Jamal Lakhiry, Directeur Commercial, Wafa Immobilier, Casablanca
- Mssr. Mohamed Larbi Rekiouak, Dir. De la Gestion et Contrôle des Engagements, Banque Centrale Populaire, Casablanca
- Mssr. Aziz Benmaazouz, Dir. Général, Fondation Zakoura, Casablanca
- Mssr. Abdelaziz Filali-Belhaj, Dir. Général, Agence National de Lutte contre l'Habitat Insalubre (ANHI), Rabat
- Mssr. Driss Jettou, Président de l'Association Al Amana, Rabat
- Mssr. Noureddine Ayouch, Président, Fondation Zakoura, Casablanca

- Mssr. Youssef Tazi, Dir. du Cabinet, Ministère de l'Economie Sociale, des Petites et Moyennes Enterprises et de l'Artisanat, Chargé des Affaires Générales du Gouvernement, Rabat
- Mssr. Mohamed Bouassami, Respnsable de Programmes, PNUD, Rabat
- Mr. Paul Rippey, Conseiller Technique, VITA, Rabat
- Mssr. Fouad Benjelloun, Association Al Amana
- Madame Leila El Harrak, Association Al Amana
- Mssr. Fouad Benchekroune, Directeur Adjoint, Direction de l'Habitat Social
- Mssr. Khalid Marrakchi, Chef du Division Marché, Direction de l'Habitat Social
- Madame Ikhlas Amghar, Chef de Service des Banques, Département du Trésor
- Mr. Dan Gowan, USAID
- Mr. Andrew Plitt, USAID
- Dr. Tina Dooley-Jones, RHUDO, USAID/Morocco
- Mssr. Taoufik Bakkali, USAID
- Mssr. Jawad Bahaji, USAID

Mr. James Bednar began the proceedings by welcoming the group to the roundtable on behalf of USAID. Mr. Howard Kane then outlined the format for the roundtable, introduced the study team members. Dr. James Christian presented the team findings and recommendations to the roundtable.

Dr. Christian discussed the key elements for a successful housing finance delivery system that currently exist in Morocco:

- A **target population** with the ability to invest personal savings to homeownership and *willing and able* to pay market rates to access financing for homeownership;

- A **retail** finance delivery system well suited to working with the target population (microfinance institutions, or MFIs);
- A **wholesale** finance delivery system willing to invest in housing (commercial banks).

The missing link necessary to make this system fully operational is a law allowing MFIs to make loans for housing. Until the law can be amended to allow this, other solutions are available. The most efficient solution appears to be a design that calls for the creation of an MFI "NGO subsidiary". The NGO subsidiary will be known as an OSU (origination and servicing unit) and will act as an agent for the commercial banks. The commercial banks will be the lenders of record, but the OSU will originate all loans on their behalf and service monthly collections. The OSUs will "pool" the loans into packages that will generate cash flows on a scale more appealing to banks: the OSU will receive monthly principal and interest payments from borrowers, retain a servicing fee to compensate their expenses, and then pass-through to the banks a consolidated payment from the pool. This arrangement will save the banks considerable time and expenses in originations and servicing.

The pilot project concept is one that attempts to bridge the divide between mainstream bank lending/investing and low-income housing lending by creating a homogenous investment instrument that is appealing to banks' cash management and investment preferences. To create this homogeneity, a number of credit enhancements are built into the program:

- A DCA guarantee covering 50% of the banks' investment (default risk);
- A delinquency reserve fund equal to 3 months of a borrowers payments held in a savings account at the banks;
- A loan loss reserve of 300 basis points booked by the banks from their nominal yield;
- The possible use of solidarity group lending where feasible;
- The possible "retention" of homeowners' titles to properties as an incentive for repayment; and
- Consistent, predictable payments to the banks from the pools managed by the OSUs.

Following his presentation of the institutional framework, Dr. Christian reviewed the results of preliminary cash flow analyses, and summarized anticipated technical assistance from USAID and a timeline for action. The complete presentation is attached to this report as Annex A.

III. Discussions

The presentation concluded at 10:30 AM and discussions then ensued until approximately 12:30 PM. The following annotates the key discussion points and views aired at this time.

Pricing Risk and Adequacy of Interest Rate

Comments: Bank Populaire expressed some concern regarding the risks involved, the pricing of the risk, and the adequacy of the interest rate. Also, there was some general confusion on the credit enhancements outlined in the presentation and especially how they would work.

Resolution: Interest rate "grossing up" was discussed in general as was the risk coverage afforded by the program. It was explained and agreed that the banks' investments would receive approximately 68% risk coverage. This enhancement taken together with the MFIs 99.5% collection rate history offers the banks a generous risk reduction package needed to demonstrate the efficacy of the proposed pilot project. It was agreed that the consultants would meet individually with the banks to further answer any questions and develop a rational pricing policy.

Alternative Solutions

Comments: The Ministry of Housing expressed their support for the design and wishes to see the program advance quickly. They did ask, however, if other alternatives were considered, especially ones that could make use of subsidies.

Resolution: The consultants discussed the weaknesses of interest rate subsidies as a burden to the government and for the fact that they tend to hold housing programs hostage to government budget swings and changes. It was reiterated that this program attempts to avoid further government subsidies and still allow affordable housing finance to a currently unserved population. As such, this program is the only design that could be considered, especially until the lending laws can be amended.

Program Support

Both of the MFIs present, Al Amana and Foundation Zakoura, expressed strong support for the program design as presented. They stressed that this is above all a pilot project and that the pilot project will be used to develop the evidence for formalizing this concept nationwide.

Final meeting conclusions were to proceed with the pilot project with the stipulation that financial details still needed to worked out with the banks.

Annex A

Slide 1

Establishing Microfinance Mechanisms for Housing

Pilot Project in Morocco

Slide 2

The Challenge

- Construction Cost Estimates for Core Unit (Dirhams)

Construction Phase	Low	High
Foundations (excavation and leveling)	10,000	15,000
Filling the perimeter with agglomerate	5,000	7 ,500
Pouring concrete slab and support structures	20,000	20,000
(this phase has to be accomplished in 10 days)		
Construction of walls for the ground floor	2,500	3,000
Totals	37,500	45,400

Slide 3

Target Group Income
(sample of 311 ANHI Clients)

- Income Distribution:

Less than 10,000 per annum	7.8%
10,000 to 30,000 per annum	79.7
More than 30,000 per annum	12.6

- Median Annual Income = 20,000 dhs
- Average Annual Income = 21,709 dhs
- Range = 5,400 to 66,000

Slide 4

Credit Demand
(sample of 311 ANHI Clients)

Less than 5,000	Almost no interest
10,000	10% of the target group
15,000	10% of the target group
20,000	29% of the target group

Slide 5

Annual Loan Payments,
9% Interest, 8% Servicing
(dirhams)

Loan Amount	Term to Maturity 12 Mos	18 Mos	24 Mos	30 Mos	36 Mos
2500	2833	1930	1480	1210	1030
5000	5667	3862	2960	2420	2061
7500	8500	5793	4440	3630	3090
10000	11334	7724	5921	4840	4121
12500	14167	9655	7401	6050	5152
15000	17000	11586	8881	7260	6182
17500	19834	13516	10361	8470	7212
20000	22667	15448	11841	9681	8242

Slide 6

Annual Income Required,
25% of Income to Repayment
(dirhams)

Loan Amount	12 Mos	18 Mos	24 Mos	30 Mos	36 Mos
2500	11334	7724	5920	4840	4121
5000	22667	15448	11841	9681	8242
7500	34001	23171	17762	14521	12364
10000	45335	30895	23683	19361	16485
12500	56668	38619	29604	24201	20606
15000	68002	46343	35524	29042	24727
17500	79336	54067	41445	33882	28849
20000	90670	61791	47366	38722	32970

Slide 7

Institutional Structure

- **MFI Strengths**
- Experience in Lending to the Target Group
- Market Identification
- Internal Policy Consistency

- **MFI Weaknesses**
- No Authority to Lend for Housing
- No Deposit-taking Authority

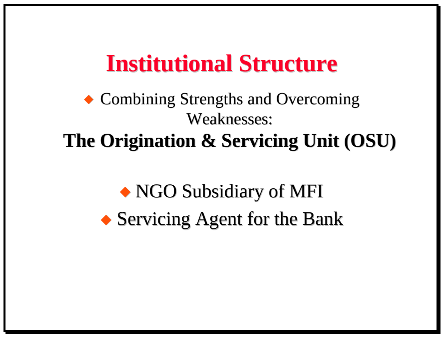
Slide 8

Institutional Structure

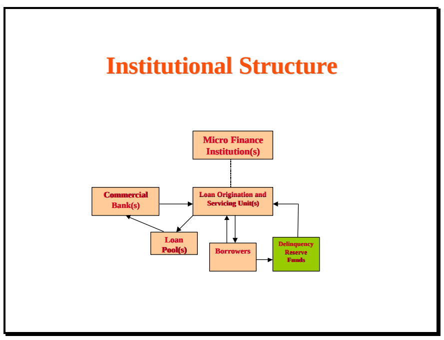
- **Commercial Bank Strengths**
- Full Home Lending Authority
- Strong Deposit Base

- **Commercial Bank Weaknesses**
- Lack of Experience in Lending to Target Group
- Potential Internal Policy Inconsistencies

Slide 9



Slide 10



Slide 11

Financial Structure

- **Credit Enhancements**
- Delinquency Reserve Fund
- USAID/DCA Guarantee
- Group Credit Life Insurance
- Loan Loss Reserve
- Solidarity Groups

Slide 12

Delinquency Reserve Fund

- Preserves steady repayment flow to bank
- Equal to at least 3 months' payments at time of loan disbursement
- Accommodates borrower's special needs: back-to-school expense, religious holidays, illness
- Balance reverts to the borrower when loan is repaid

Slide 13

USAID/DCA Guarantee

- Covers 50% of the exposure to the risk of default

Slide 14

Group Credit Life Insurance

- Borrower’s debt repaid in the event of his death

Slide 15

Loan Loss Reserves

- Loan loss reserve equal to 3 percentage points of the lending rate set aside by the banks to cover defaults

Slide 16

Solidarity Groups

- Permitted, but not mandated
- Potential for cost reduction
- Potential for delinquency/default control

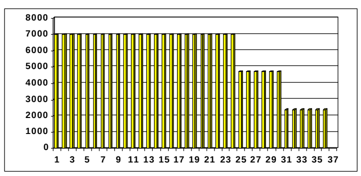
Slide 17

Loan Pools

- Pools of 20 or more loans formed by OSU
- Repayment flows mimic main line bank loans
- Reduce bank administrative expense
- Anticipate long-term MFI source of funds
- Anticipate securitization and a secondary mortgage market

Slide 18

Pass-Through Cash Flows,
Type A Loan Pool
(dirhams)



Slide 19

Financial Structure

- Bank Lending Rate = 9% (6% return on Investment, 3% loan loss reserve)
- Origination Fee = 200 dirhams, paid by borrower to OSU at time of loan approval
- Servicing Fee = for example, 412dh per year on an 11,500dh, 30 month loan, paid by the borrower

Slide 20

Financial Structure

- **Staffing and Estimated On-Going Costs of Operation of the OSU (dirhams)**

Salaries & Fringe Benefits:	
Loan Officers/Credit Agents (4)	**12,000**
Credit Coordinator (0.5)	**6,000**
Office Manager (1)	**3,600**
Allocated Cost for MFI Accounting	**3,000**
Transport, telephone, etc	**3,000**
TOTAL Monthly Cost	**27,600**
TOTAL Annual Cost	**331,200**

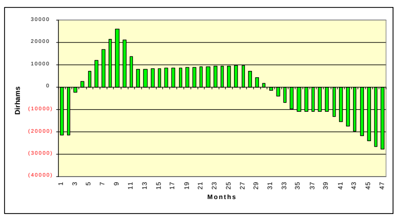
Slide 21

Average Servicing Cost per Loan
(Percent of Loan Payment)

Average Loan Size (dirhams)	Number of Loans in Portfolio 500	750	1000
5000	27.7%	18.5%	13.9%
7500	18.5	12.4	9.2
10000	13.8	9.2	6.9
11500	12.1	**8.0**	6.0
12500	11.1	7.4	5.6
15000	9.2	6.2	4.6

Slide 22

Pilot Project
Net Cash Flows
(Monthly, Base Case, 750 loans)



Slide 23

Technical Assistance

◆ Resident Advisor	18 to 24 Mos
◆ Short-term Technical Assistance	3 Person Mos
◆ Off-site Training for OSU Staff	4 Person Mos

Slide 24

OSU Capital Equipment Requirements

◆ Desk-top Computers	1-2 per office
◆ Printers	1 per office
◆ Office Furniture (desks, chairs, etc)	3 sets per office
◆ Vehicles (motorcycles)	3 per office

Slide 25

Timelines for Action

◆ Resident Advisor	2-3 months ahead of pilot project launch
◆ Legal Formation of OSU	2 months ahead of pilot project launch
◆ Execute Memorandum of Understanding	2 months ahead of pilot project launch
◆ Recruit Key Staff for OSU	2 months ahead of pilot project launch

Slide 26

Supplemental Recommendations

- Increase the size of pilot project from 1,100 to 1,500 to 2,000 beneficiaries
- Enlist participation of two MFIs

Appendix E: Generic Memorandum of Understanding (Draft)

On this day of ../../2001, …………… (the OSU), a[n] [not-for-profit ?] "Origination and Servicing Unit" wholly-owned subsidiary of ………., and ………. (the Bank), agree to establish a joint-venture for the provision of housing micro-credit finance to low-income groups under the following terms and conditions.

The OSU will perform the following functions as the Agent of the Bank:

Select and evaluate potential low-income borrowers requiring micro-loans to construct, expand or otherwise complete the acquisition of their dwelling units. The types and price ranges of units qualifying for this financing are described in Attachment "A", as may be modified from time to time by agreement between the parties.

Underwrite and complete individual loan contracts with qualifying borrowers under the terms and conditions established in Attachment "B", or as these may be subsequently modified from time to time by agreement between the parties. In all cases, these terms and conditions will require that origination and servicing fees charged by the OSU be adequately provided for through incorporation in the loan terms. The effectiveness and application of required down-payments or borrower contributions will be similarly provided for in the loan agreement and monitored thereafter by the OSU for their continued availability as the borrower's equity investment.

Monitor the individual construction projects being financed, to ensure both: (a) the quality of the construction and its conformity with all applicable urban and construction regulations; and (b) the proper disbursement of loan funds under the approved project. Particular attention will be paid to avoiding any instance of "materialmen's" claims for delivered and unpaid-for goods or services.

Service the individual loans, keeping adequate records and ensuring timely payment of principal and interest thereon. To this end, the OSU will discharge with due diligence, promptitude and effectiveness all required collection efforts.

Package the agreed upon number of individual loans in pools generating a repayment cash flow to the bank or in such numbers as may otherwise from time to time be agreed to by the parties or in such numbers as may otherwise from time to time be agreed to by the parties..

Manage and make effective all guarantees and other credit enhancements triggered by any delinquent loans .

The Bank's line of credit for the purposes described in this Memorandum of Understanding will be established and made available to the OSU on a revolving basis during a period terminating on ../../…., or for any such extended period as may otherwise be established by agreement between the parties. The line will require cancellation in full as to principal and interest at its established termination date.

The individual loans and their ensuing pools approved by the Bank will be secured, at a minimum, by the credit enhancements described in Attachment "C," which itself may be modified from time to time by agreement between the parties.

Appendix F: Scope of Work for Phase 2 of Project

Scope of Work
Phase II
Morocco Housing Microfinance Project

Introduction

As part of its effort to improve economic opportunities for the poor in Agadir, Morocco, USAID-Morocco contracted Abt Associates Inc. to develop a program concept for a microfinance housing scheme that will serve as a demonstration for a country-wide finance mechanism. The program steps planned by USAID are as follows: Phase I—Program Design; Phase II—Program Implementation; and Phase III—Program Evaluation. Abt Associates has completed Phase I—Program Concept. This scope of work addresses Phase II--program implementation.

Background

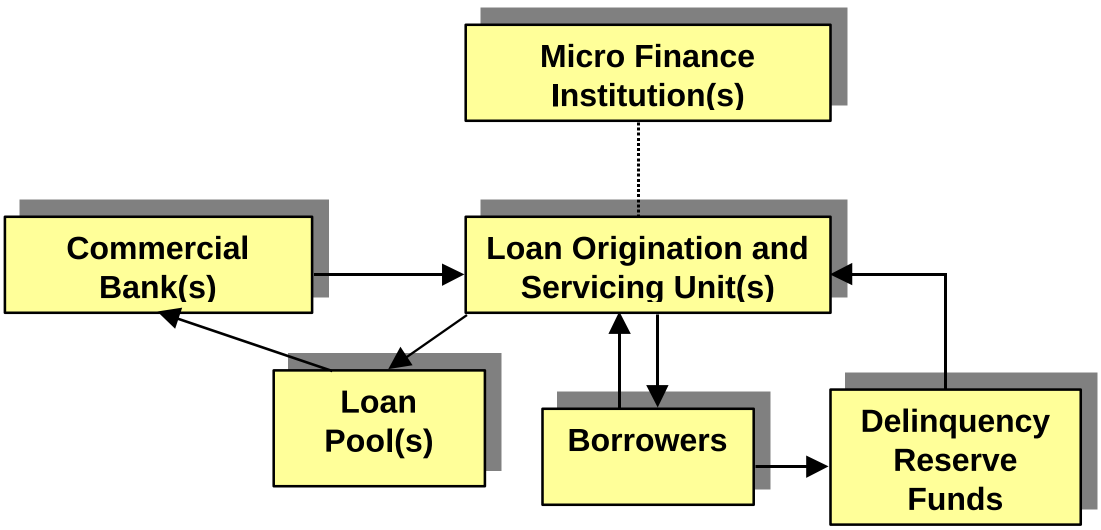
The Bidonville Resettlement Program (BRP) being conducted in Morocco under the auspices of the Ministry of Habitat and the *Agence Nationale de la Lutte Contre l'Habitat* (ANHI) has made great strides, but the pace of the program has been hampered by the lack of credit for home construction on the serviced sites prepared and sold to the target beneficiaries by ANHI.

Concurrently, Morocco's fledgling Micro Finance Institutions (MFIs) have expanded rapidly to serve the microenterprise credit needs of the population who are the primary targets of ANHI's Bidonville Resettlement Program.

Micro lending for small enterprise and micro lending for housing are somewhat different, however, and the regulatory authorities have been reluctant to authorize home construction lending for MFIs. To determine the feasibility of MFI home lending and to gain valuable experience in this field, a pilot project on home lending to ANHI's target population in the Tikiouine neighborhood of Agadir has been proposed.

MFIs are most experienced in lending to the target population but they do not presently have authority for home lending or savings mobilization. Commercial banks have both home lending authority and a broad base of deposit resources. Commercial banks lack the experience in lending to the target population, however. Moreover, the banks' internal policies and practices in serving its primary lines of business are likely to be at significant variance with the procedures required for delivering credit to the informal sector.

To bridge this gap and combine the respective strengths of the MFIs and the commercial banks, the recommended institutional design of the pilot project calls for a participating MFI to establish a not-for-profit subsidiary—an Origination and Servicing Unit (OSU)—to deal directly with the target population, acting as agent for the participating commercial bank. The commercial bank will be the legal lender of record, but the OSU will administer the process of granting loans to the target population and collecting the loan installments under an originating and service agreement between the OSU and the commercial bank. The OSU will receive an origination fee from the borrower when the loan is disbursed to cover the cost of loan processing. A fee to cover the OSU's cost of servicing will be added each month to the loan payment. The bank will receive an appropriate rate of interest as a return to investment plus a monthly contribution to a loan loss reserve. The schematic below depicts this proposed institutional arrangement:



If the pilot project is successful, an empirical basis for conferring home lending authority on the MFIs would be established and the OSU subsidiary could easily be absorbed into the MFI where combining operations would result in additional cost efficiencies and marketing synergies.[23]

This program concept has now been accepted by the key participants in the program: the relevant Ministries, the Commercial banks, and the microfinance institutions. USAID/Morocco has assisted the participating entities in executing *Memorandums of Understanding* (MOUs) setting out, in principle, the financial parameters, relationships, and responsibilities under this project. Each participating entity has designated a key

[23] For complete details on the program concept, refer to Abt Associates Inc., "*Establishing Mechanisms for Housing Microfinance Pilot Project in Morocco", Cambridge, March 30, 2001*

representative which, taken collectively, will form the basis of an "implementation team". In order to maintain this program momentum, it is imperative that implementation commence as quickly as possible. This scope of work outlines the tasking needed to accomplish this.

Resident Advisor

The contractor will immediately recruit and place in Agadir, Morocco a long-term resident advisor (RA) to manage program implementation. Due to budgetary and time constraints for this project, the RA will have to play a key technical role during implementation. As such, the RA will not only manage project implementation, but will also provide the TA in most cases. The RA must have strong experience in low-income housing finance programs. Experience in microfinance lending programs will be an added benefit. Additionally, the RA must be fluent in either French or Arabic. The tasks for which the RA will be responsible are detailed below.

Implementation Tasks

The following table summarizes the minimum anticipated tasks to be performed in the course of project implementation. The parties responsible for implementing these tasks are also set out.

Area	Item	Rationale	Responsible Individual/Entity	Participants in execution
Coordination	Support the coordination of the activities of the several participating organizations (ANHI, the banks, OSUs and parent MFIs) as the pilot project is launched and proceeds. This will include assisting with legal formulation, negotiating between parties, and establishing "ground rules".		Resident Advisor (RA)	RA, USAID, Implementation team (IT)
Procedure manuals	Origination Manual and Forms	Standardize underwriting procedures and criteria.	RA	RA, IT
	Servicing Manual and Forms	Standardize collection and customer support procedures.	RA	RA, IT
	Loan pooling Manual and Forms	Establish criteria for establishing loan pools, cash management procedures, delinquency fund procedures, etc.	Short-term technical assistance (STTA), RA	STTA, RA, IT
	Monitoring and Evaluation Manual and Forms	Design information gathering and reporting procedures to establish management information system (MIS) and establish basis for measuring project success.	RA, local STTA	RA, local STTA, IT

Area	Item	Rationale	Responsible Individual/Entity	Participants in execution
Preparatory Logistics	Offices	Rent suitable office space and outfit with appropriate furniture, equipment, and supplies.	Particpating institutions	IT, RA
	Staffing	Hire and place appropriate number of credit agents, coordinators and office managers in Agadir OSUs.	Participating MFIs/OSUs	Participating MFIs/OSUs, RA
	Bank accounts	Open bank accounts in the name of the OSU	OSUs	RA, OSUs
Marketing	Advertising and Public Awareness Program	Develop program to inform target market of program availabiltiy, details, commencement date, etc.	RA	RA, OSUs, local STTA
Training Program	Loan origination training	Using origination manuals, train credit agents in application taking, and prudent underwriting procedures.	RA	RA, Participating MFIs, local STTA
	Portfolio Servicing training	Using servicing manuals, train credit agents in collection procedures, loan “work out” criteria, etc.	RA	RA, Participating MFIs, local STTA
	Loan Pool Management training	Using loan pooling manuals, train office managers, accounting personnel in cash flow management, reporting, delinquency reserve fund management, and DCA procedures.	RA	RA, Participating MFIs, STTA, USAID, IT
	Management Information System Training (MFI)	Using Monitoring and Evaluation Manuals, train office managers and other appropriate participants in information gathering and reporting.	RA	RA, Participating MFIs, local STTA, IT
Project Start	Process applications	Loan underwriting process begins and continues through term of pilot project	OSUs	OSUs, RA
	Approve loans and establish delinquency reserve funds	Loan commitment to borrowers and set up savings accounts for reserve fund—borrower begins paying monthly quotas to reserve fund.	OSUs	OSUs, RA
	Inspect construction sites	Inspect sites before and after loan disbursements to insure proper use of funds.	OSUs (credit agents)	OSUs, RA, local STTA
	Drawdown loans from banks	Draw on LOC from participating banks	OSUs, banks	OSUs, banks, RA
	Close (disburse) loans to borrowers		OSUs	OSUs, RA, local STTA
Monitoring & Reporting	Reports to USAID	Monthly progress report to USAID	RA	RA, local STTA
	Closings and Collections Report	Monthly report covering all closings and a detailed summary of collections (to RA, USAID, MFIs)	OSUs	OSUs, RA, local STTA

Area	Item	Rationale	Responsible Individual/Entity	Participants in execution
	Loan Pool Report	Monthly report on management of loan pools (to RA, USAID, banks, MFIs)	OSUs	OSUs, RA, local STTA
Evaluation	USAID selects firm to perform project evaluation		USAID	
	Evaluation performed		Contractor	Contractor, RA, OSUs, USAID
	Evaluation Report		Contractor	Contractor

Short-term Technical Assistance

The RA will be supported through the efforts of short-term technical assistance, both from local Moroccan firms/consultants and from U.S.-based experts. At this time, it is anticipated that the STTA will support the following tasks:

Loan Pooling Manual and Forms

The most innovative aspect of the pilot project is the pooling of micro loans and the management of the cash flow from those loan pools in a way that makes the micro loan portfolio mimic loans of a size which banks are accustomed to granting. This approach anticipates a time when banks and other financial institutions will be investors in these loan pools, much as financial institutions in the United States invest in mortgage-backed securities created by conduits such as the Federal National Mortgage Association by pooling numerous individual mortgage loans. Consequently, the type of technical assistance most likely to be required relates to this activity.

It is anticipated that the MFIs involved in the pilot project will have sufficient experience with lending to the target population to handle most of the special training needs for the additional personnel hired to man the OSUs. Whether or not these or other personnel of the OSU/MFI or the banks require off-site training in micro finance and/or the special techniques of loan pooling and loan pool cash flow management can be determined by the resident advisor in coordination with USAID.

STTA from U.S.-based experts will probably be needed to help establish the pool management procedures, particularly reporting procedures. In this respect, the following measureables need to be explained and monitored, and reported: pool size, pool homogeneity, weighted average maturity (WAM), weighted average coupon (WAC), conditional prepayment rates (CPRs) (if applicable), as well as other factors deemed critical for monitoring purposes.

The STTA could also be applied to cash flow maintenance procedures: applying funds from the delinquency reserve funds, applying for DCA settlements with respect to defaults (when appropriate), and general reporting requirements.

Monitoring & Evaluation Program and Forms

The RA, with local STTA support, will design a project monitoring and evaluation program within 6 months of his/her arrival. The purpose of this is two-fold: first, the program will serve to develop a Management Information System—data necessary to monitor program effectiveness and to spotlight potential problem areas. Second, the data collected through program monitoring can be used for the program evaluation sometime in the second year of the project. This evaluation will establish the needed evidence to warrant continued project implementation. USAID will be responsible for contracting the project evaluation and the RA will fully support the evaluation program information gathering efforts.

Currently, the following reports will comprise the monitoring program. These may be modified by the resident advisor, with USAID approval, after his/her arrival at post.

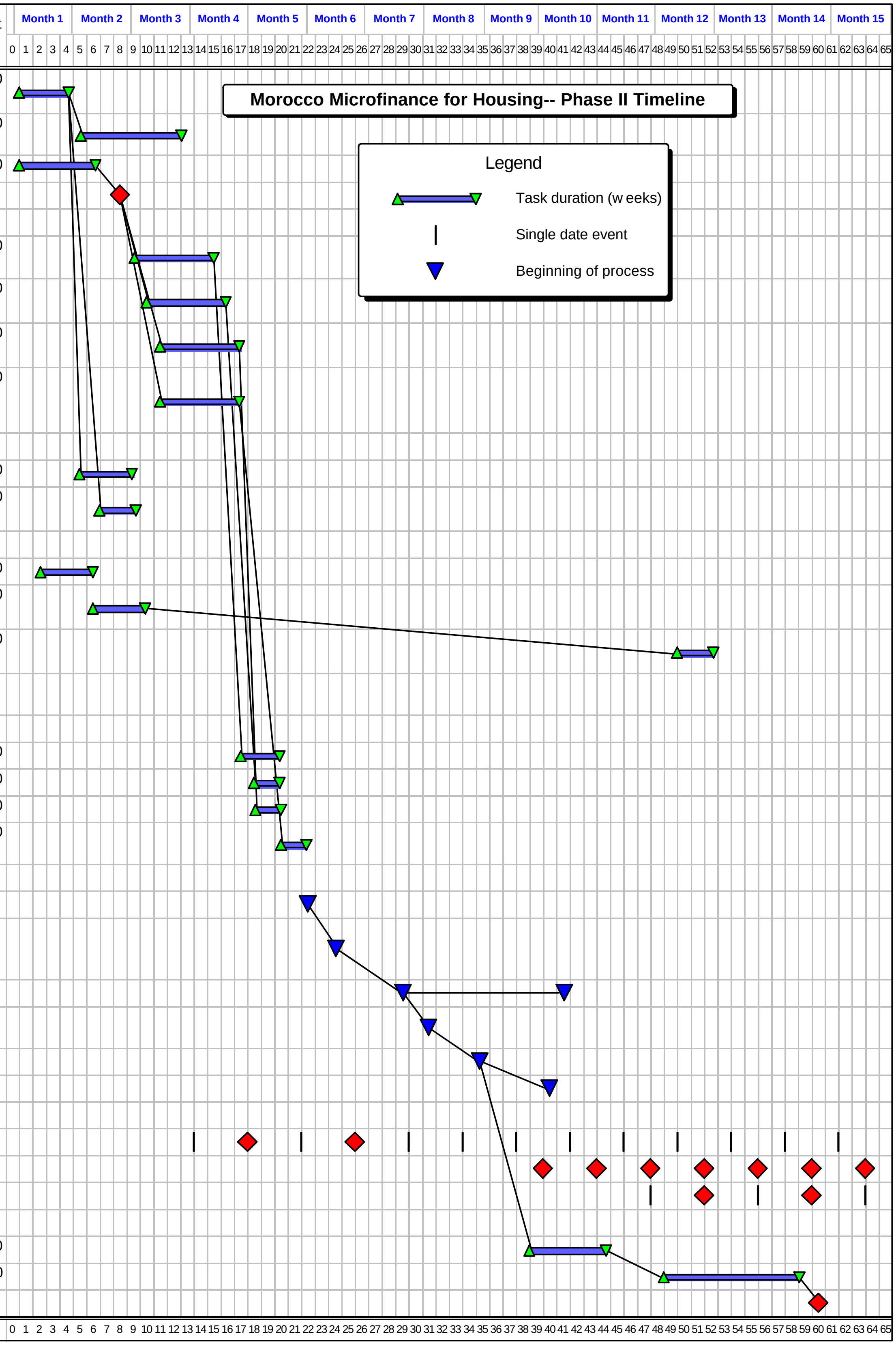
Monthly USAID Progress Reports: the RA will report each month to USAID the progress of project implementation. This report will include descriptions of progress against each task in the Scope of Work as well as quantitative details with respect to loan originations, collections, and loan pool management. In addition, the report will analyze project delinquencies and defaults and provide advance indications for the potential of DCA claims. Project budget analysis will also accompany this report.

Monthly Closing and Collections Report: this report will be prepared by the OSUs (with assistance from the RA and/or local STTA. This report will contain all details regarding loan closings during the preceding month (i.e., borrower name, borrower family income, underwriting criteria that formed the basis for loan approval, loan term, interest rate, monthly payment, delinquency fund account details, etc.). The report will also cover collections for the preceding month—loan number, amount due, amount collected, dates, amounts past due, months past due, balance in reserve fund, remedial details, etc.

In addition to the above reports, a monthly loan pool report will be collected as described on the previous page.

The project tasking described above, including the short-term technical assistance needs, are further depicted on the timeline shown on the next page.

Activity Name	Responsibility	Duration
MOUs between banks and MFIs	USAID	4.00
Secure DCA Guarantee for bank loans	USAID	7.40
Recruit and Hire RA	Contractor	6.00
RA arrives in Morocco	Contractor	
Procedure Manuals		
Origination Manual and Forms	RA	6.00
Servicing Manual and Forms	RA	6.00
Loan pooling Manual and Forms	RA, STTA	6.00
Monitoring and Evaluation Manual and Forms	RA, local STTA	6.00
Preparatory Logistics		
Rent office space	MFIs/OSUs	4.00
Open bank accounts in name of OSUs	MFIs/OSUs	3.00
Staffing		
Hire Coordinator	MFIs/OSUs	4.00
Hire Office manager and Credit Agents	MFIs/OSUs	4.00
Hire Additional Credit agents (2)	MFIs/OSUs	3.00
Develop advertising and public awareness		
Training Program		
Loan Origination	RA	3.00
Servicing	RA	2.00
Loan Pool Management	RA	2.00
Management Information Systems	RA	2.00
Project Commences		
Process applications	OSUs, RA	
Approve loans and establish delinquency reserve funds	OSUs, RA	
Site inspections	OSUs, RA	
Draw down LOCs from banks	OSUs, banks	
Close loans with borrowers	OSUs	
Begin Collections	OSUs, RA	
Monitoring & Reporting		
USAID Progress Reports	RA	
Closing & Collections Report	OSUs	
Loan Pool Report	OSUs	
Project Evaluation		
Select Evaluation contractor	USAID	6.00
Evaluation period	Contractor	10.20
Evaluation report	Contractor	



Level of Effort

The following table gives estimates of the level of effort to be budgeted for project implementation:

Resident Advisor	18 to 24 person-months
Short-term Technical Assistance (STTA)	3 person-months
Local STTA	12 person-months
Off-site Training for OSU Staff, 4 persons	4 person-months

Budget

To be determined and inserted at a future date.

Reporting Relationship

The contractor, including the RA, will report to designated staff members of the Office of Economic Growth, USAID/Morocco.